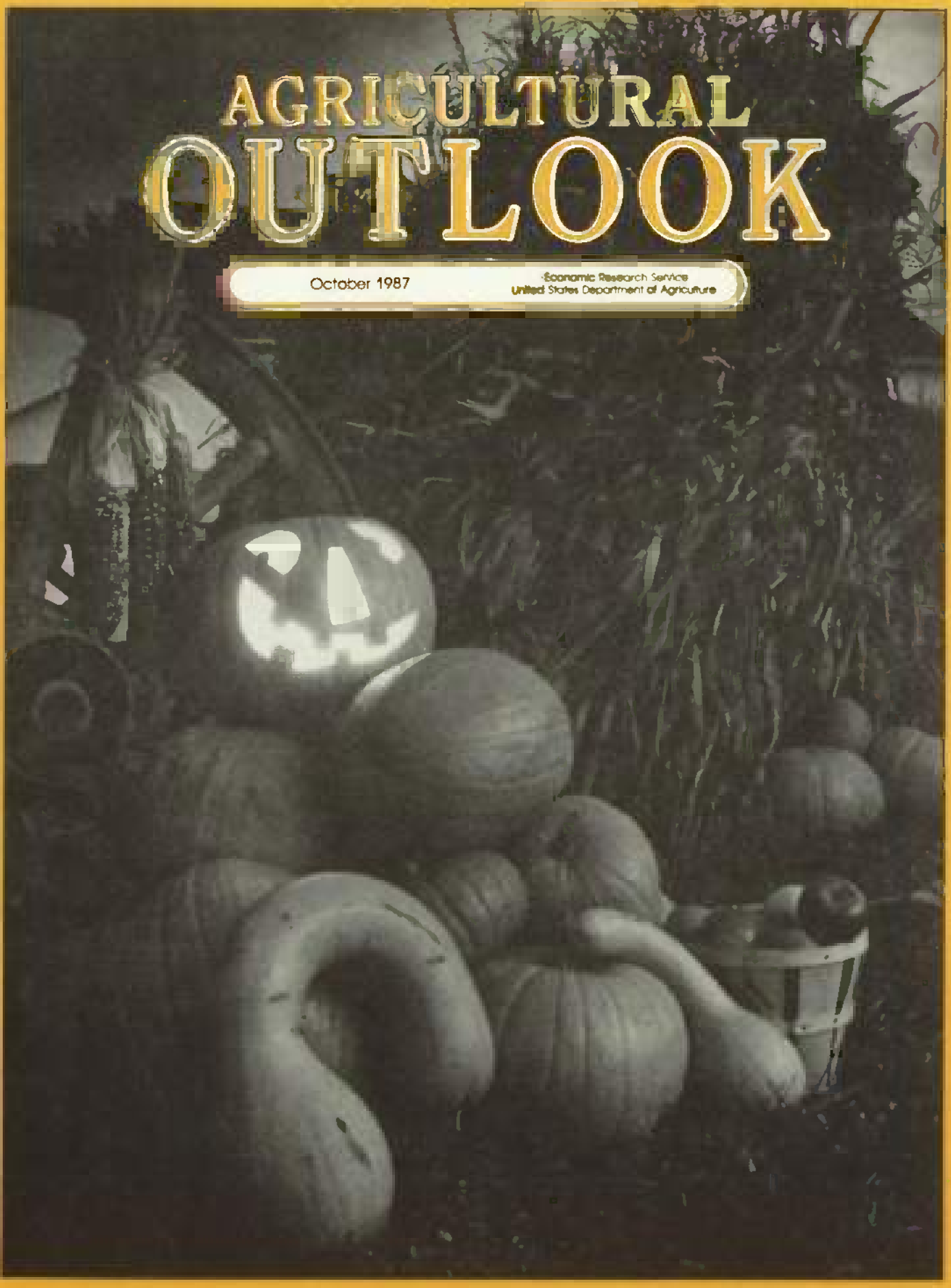
AGRICULTURAL OUTLOOK

October 1987

Economic Research Service
United States Department of Agriculture



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October 1987/AO-135

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In Brief . . . News of Exports, Bank Failures, Labor Costs

Farm output this year is nearly equal to 1986, with increases in livestock products and high-value crops almost offsetting reductions in field crops. Storage capacity should be adequate for the 1987 harvest. Ample supplies of grazing land and hay could intensify competition for stocker-feeder cattle, and many cattle could remain on pasture longer for additional weight gain.

For many crops, yields are high this season; crops were planted early, rains were timely, and there were few sustained periods of hot weather. Yields are high also because acreage idled in commodity programs is usually the least productive land, and idled area was up sharply this season.

The world's grain and cotton crops in 1987/88 will be smaller than last year's. Grain production is expected to total 1,614 million tons, down 4 percent from 1986/87. Projections for all grain crops, most importantly for rice and coarse grains, were lowered in September, largely because of the growing impact of the drought in southern Asia.

Except for rice, large stocks have cushioned the impact on world trade and prices. For cotton, competitor production will be smaller than initially estimated, and prices are up sharply over last year. For oilseeds, the world faces another year of record crops, low prices, and intense international competition for U.S. soybeans and products.

The forecast for U.S. agricultural exports in fiscal 1987 is for a value of $28 billion and a volume of 129 million tons. Volume is up 18 percent from a year earlier, but with lower prices, value is up less, at 6 percent. Still, the export trade balance is up about

$2 billion. Exports are expected to expand again in 1988, gaining in both value and volume, as world agricultural trade rises and the United States maintains or widens its trade share.

Falling farm expenses are helping boost farmers' incomes, but they spell problems for input suppliers. Suppliers expanded during the rapid agricultural growth of the 1970's; now they are adjusting to reduced demand for fertilizers, pesticides, machinery, and other inputs. For most farm input industries, plant capacity, capital expenditures, and employment have been reduced.

Although net cash income is setting another record in the $54-$58 billion range this year, and the credit crunch appears to have passed its peak, bank failures are not abating. Commercial bank failures during the first half of this year increased 50 percent from a year earlier. Failures of banks in rural areas during January-June were the highest of any 6-month period in the 1980's. However, the proportion of rural bank failures to total failures is slightly below its 1985 peak.

The general economy is completing its fifth year of uninterrupted expansion, and growth is likely to continue through 1988. So far this year, real export growth has led the way at an annual pace of about 11 percent.

Farm and nonfarm exports respond to the same macroeconomic forces, such as the value of the dollar, monetary and fiscal policies, and the international debt crisis. Thus, the agricultural trade surplus has been shrinking as the nonagricultural trade deficit has widened. Agriculture no longer dominates the current accounts balance, whereas once it bailed out the nonagricultural deficit.

Under the Tax Reform Act of 1986, crop producers may enjoy lower taxes, but some livestock producers may experience a net increase in taxes. The loss of capital gains exclusions will raise taxes for producers with breeding stock, and the removal of income-sheltering provisions could reduce outside investment in farming. Thus, production increases could be slowed, prices could be higher, and after-tax incomes of cow-calf, dairy, and hog producers could ultimately rise.

Food industry labor costs will likely be stable in the absence of high inflation and unemployment rates. Given this, labor's bargaining position should strengthen slightly over the next few years. The renewed strength of labor likely will narrow or end two-tiered wage scales, cut backloaded contract provisions, and lengthen hours for part-timers. Most 1987 contracts reflect low inflation by excluding COLA provisions, but as inflation rates approach 5 percent, more contracts are likely to contain COLA's.

Agricultural Economy

U.S. agriculture is starting to grow again. Growth faltered during the early 1980's when exports fell for some commodities and when some financial institutions serving agriculture got into difficulty.

Policies to help expand the farm sector often focus on one facet of the problem at a time. One group wants to increase exports, another to adopt new technology, and yet another to develop the natural resource base.

These many voices may sound like a conflict in opinion, but in a way each approach is right; at times in the history of U.S. agriculture, and in some countries today, concentration on one or another single growth strategy would help. But no single growth strategy can be successful over time if it permits the many-sided environment in which farmers work to get out of balance.

The complexity of agricultural growth can be seen by viewing five categories: resource availabilities, advancing technology, the demand for food and farm products, spatial location of agricultural enterprises, and institutional arrangements affecting the way farmers interact with their economic environment.

Only two of these categories, demand and institutions, caused major problems for U.S. agriculture during the early 1980's. But balance among all of them will determine the growth of agriculture during the 1990's.

Five Elements Determine Agricultural Growth

The *demand* for farm products became a problem for U.S. farmers when their export markets shrank during the early 1980's, following rapid growth in demand for corn, wheat, and soybeans during the 1970's. The downturn was a major cause of agriculture's recent financial difficulties. Earlier periods of demand shifts of this magnitude were usually connected with wartime needs. Domestic growth in the demand for farm products is relatively steady and predictable.

Institutions affecting farm credit became troubled during the early 1980's. The subsequent increase in credit costs helped put farmers in a cost-price squeeze. Earlier, these financial institutions contributed to agricultural growth by supplying the capital to consolidate farms and adopt new technologies.

A broad mix of public and private institutions helped the agricultural sector assess goals, resolve conflicts, and grow. Among these were the farm price support programs introduced in the mid-1930's, which affected farm size, farm numbers, enterprise combinations, and the rate of technological change.

Then these programs became part of the problem by contributing to higher prices and a reduced level of exports during the early 1980's. However, recent changes in the programs have made farm commodities more price competitive again, through lower price supports and export enhancement. Other export-related institutions include regulations on quotas, tariffs, and subsidies.

The land grant college system, providing a network for teaching, research, and extension, contributed significantly to the expansion in U.S. agriculture during the past century. The institutional arrangement for developing and profiting from new technology is changing now to more private development of techniques and patents. This is affecting the kinds of techniques developed and the distribution of income between the farm and nonfarm sectors; it is changing the way technology contributes to growth.

Economic analysis frequently assumes needed institutions are in place, forgetting that each was built on purpose and often under conflict. The institutions become more visible when they stop working smoothly, as some of them did during the 1980's.

Technology became a driving force in agricultural growth during the middle third of this century. In addition to offering the possibility of feeding more people from the same natural resources, technical advance provides increased income to the first farmers to successfully adopt new ways of doing things and gives a comparative advantage in international trade to the country that develops and adopts it.

Prospects are for continued technical advance in U.S. agriculture. One concern is whether this source of growth can move too quickly, and increase output so rapidly that it cannot be absorbed by the market at prices that provide adequate return to the farm sector.

Resources were a basis for growth from colonial times through the first third of this century, and still serve that role in a number of countries. Agricultural growth depended to a large extent on increasing access to land, labor, and capital.

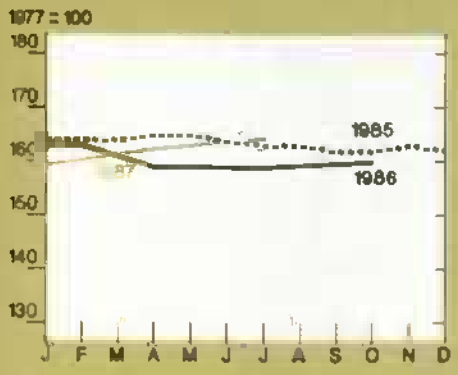
Some of the post-World War II expansion depended on irrigation of arid areas, but that is no longer a major source of growth: the United States could double exports and feed its growing population during the next few decades without additional natural resources. By continuing to add capital inputs to existing natural resources and farming more intensively, producers have now reached a stage in which the problem is conservation of the natural resources available.

Regional adjustments contribute to agriculture's resilience and flexibility. One way agriculture responds to limits in its economic environment and keeps growing is through regional relocation of enterprises. There has been a tendency for the acreage in most crops to decrease in lower yielding States and increase in higher yielding States.

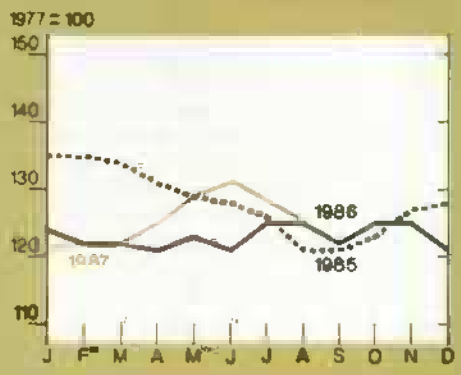
Some of the most profitable and productive farms are located close to major cities in order to gain access to central city marketing, processing, and consumers. These farms are responding to cohesive forces including

Prime Indicators of the U.S. Agricultural Economy

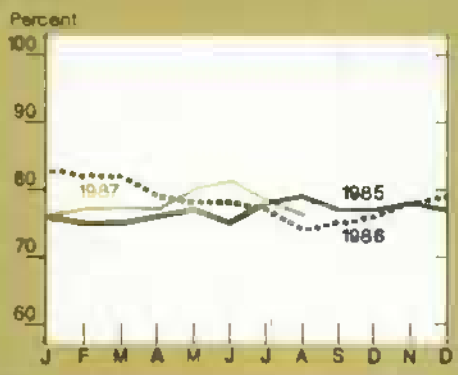
Index of prices paid by farmers[1]



Index of prices received by farmers[2]

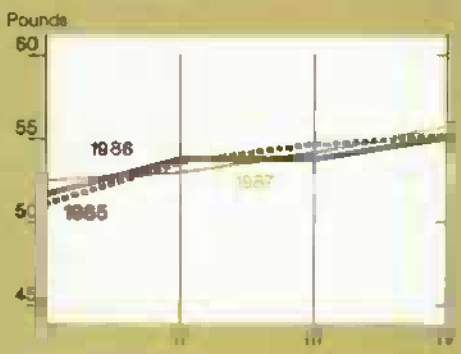


Ratio of prices received to prices paid

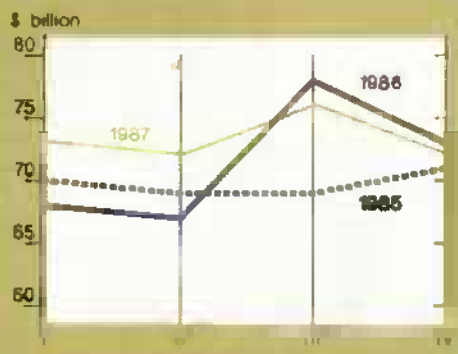


Red meat & poultry[3] production

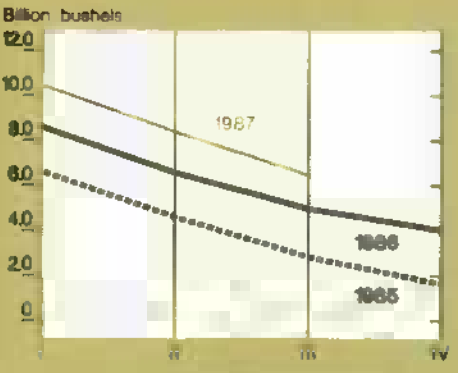
Red meat & poultry consumption, per capita[3,4]



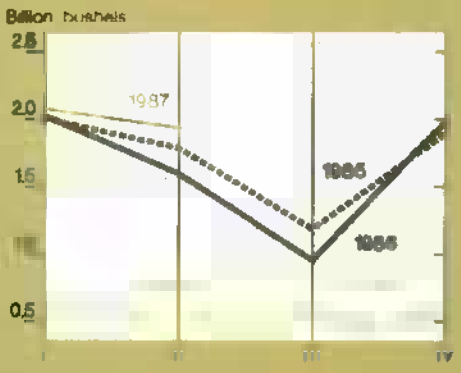
Cash receipts from livestock & products[5]



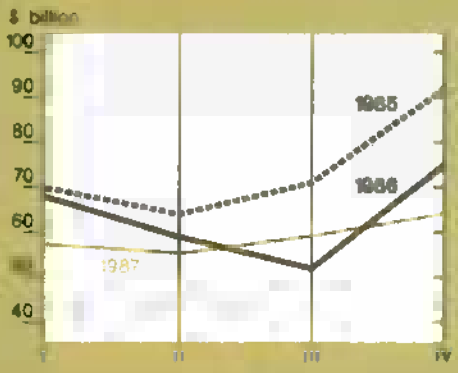
Corn beginning stocks[6]



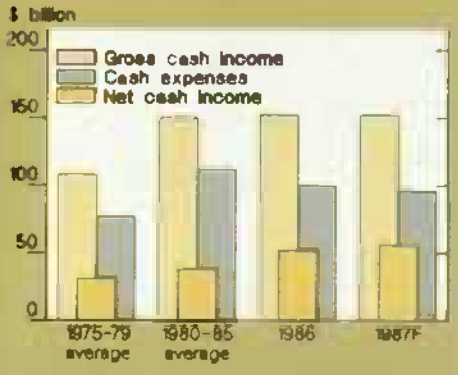
Corn disappearance[6]



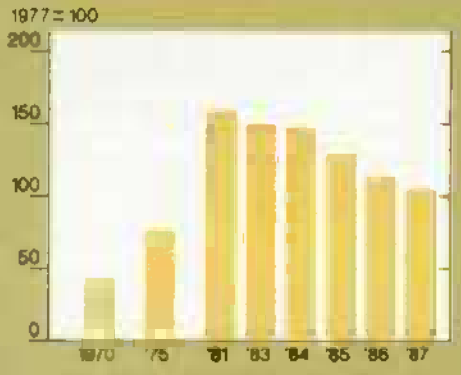
Cash receipts from crops[5]



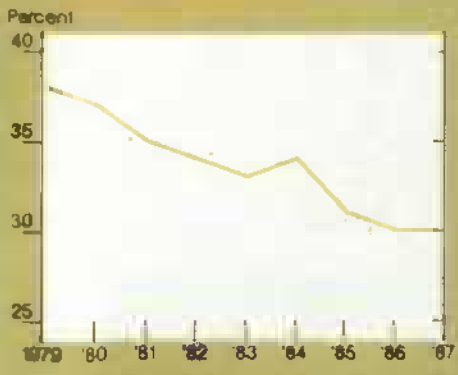
Farm net cash income



Farm real estate values



Farm value/retail food costs



[1]For commodities and services, interest, taxes, and wages. Beginning in 1986 data are only available quarterly. [2]For all farm products. [3]Calendar quarters. Future quarters are forecasts for livestock, corn, and cash receipts. [4]Retail weight. [5]Seasonally adjusted annual rate. I=Dec.-Feb.; II=Mar.-May; III=June-Aug.; IV=Sept.-Nov.

transportation costs, risk avoidance, economies of scale, and access to central city services. Dispersive economic forces place other farm enterprises in more sparsely populated areas where farmers can satisfy personal preferences and have access to resources and amenities at lower rents.

Bread has to have just the right combination of yeast, flour, liquid, sugar, fat, temperature, and kneading. If any of these is wrong, the bread won't rise properly. And agriculture has to have a balance among resource availabilities, advancing technology, expanding markets, regional location, and institutional arrangements if it is to grow.

The availability of resources, prospects for technical advance, and potential to relocate enterprises do not appear to have been major bottlenecks in the 1980's. In fact, U.S. agriculture seems to have excess capacity and could produce and market more than it now does.

The recent and major bottlenecks to agricultural growth were in the demand for U.S. farm exports and in institutions affecting exports and finance. These bottlenecks worked against U.S. farmers in the early 1980's, but they recently have been receiving much-needed attention and rebuilding.

They are opening up now, and agriculture is starting to grow again. Continued agricultural expansion will depend on the balance among people, places, resources, and technical and social ways of doing things. *[Clark Edwards (202) 786-3313]*

LIVESTOCK OVERVIEW

Barrow and gilt prices at the 7 markets averaged $60 per cwt in August, the third consecutive month of prices in the low $60's. Although hog slaughter in August was 4 percent above a year earlier, very low frozen pork stocks and lower beef production kept the price from falling. Pork production likely will continue to increase this fall, and prices are expected to decline.

In the fourth quarter, prices are expected to average in the high $40's to low $50's. In addition to increased pork output, large turkey production and stocks will weaken hog prices.

Composite retail prices for pork averaged $1.94 a pound in July, up 11 cents from a year earlier and 1 cent below the October 1986 record. The farm-to-retail spread averaged 95 cents a pound, 9 cents above a year earlier, while the net farm value averaged 99 cents, up 1 cent. Retail prices are expected to decline in the fall as pork production increases. Retail prices may average about $1.95 a pound in the third quarter, then drop to around $1.85 in the fourth.

Hogs imported from Canada totaled 215,685 head during January-June 1987, down 12 percent from a year earlier. Imports of Canadian hogs may total 300,000 to 400,000 head in 1987, compared with 503,715 in 1986.

Since the imposition of a countervailing duty of Can$4.386 per cwt in 1983, imports from Canada have dropped sharply. Recently the duty was upheld by the U.S. Court of International Trade. The ruling came on an appeal by the Alberta Pork Producers Marketing Board. The original decision to impose the duty came from a complaint filed by the National Pork Producers Council.

U.S. pork products imports from all sources during January-June totaled 586 million pounds (carcass weight), up 11 percent from a year before. Canada, the largest exporter to the United States, supplies about 47 percent of the total. Other major sources are Denmark, Poland, and Hungary, which supply 28, 11, and 4 percent, respectively. For all of 1987, pork imports are expected to total about 1,175 million pounds, up 5 percent from a year ago.

Egg Prices Lower

Egg prices in 1987 are expected to average below 1986 as production expands. Output in the first 6 months of this year was 1.1 percent higher than the same period in 1986, although long-term per capita consumption continues to decline. Per capita domestic supplies for the year are expected to be close to 1986. Egg producers likely have had enough hens laying in the summer and fall to increase production 1 percent over last year, about in line with population growth.

Production in 1988 probably will be 0.5 percent under 1987. Producers are expected to experience losses or just break even in the last half of 1987 and the first half of 1988.

The August wholesale price for cartoned Grade A large eggs in New York was 63.2 cents per dozen, down from 73 cents a year before. The second-quarter price was 58.9 cents. Prices in the third quarter of 1987 likely were 64-65 cents, down from 73 in 1986. Fourth-quarter prices are expected to run 63-67 cents, as demand for holiday cooking increases consumption. Prices in 1988 may be in the 60-66 cent range.

Exports of eggs during January-June were 2 percent below the same period in 1986. Sales to Japan were down 18 percent, but still accounted for 54 percent of total egg exports. In June, however, total egg exports were 8 percent above a year earlier. Export forecasts call for a 3-percent export increase in 1987 as the less expensive dollar and the Export Enhancement Program make U.S. egg purchases more attractive.

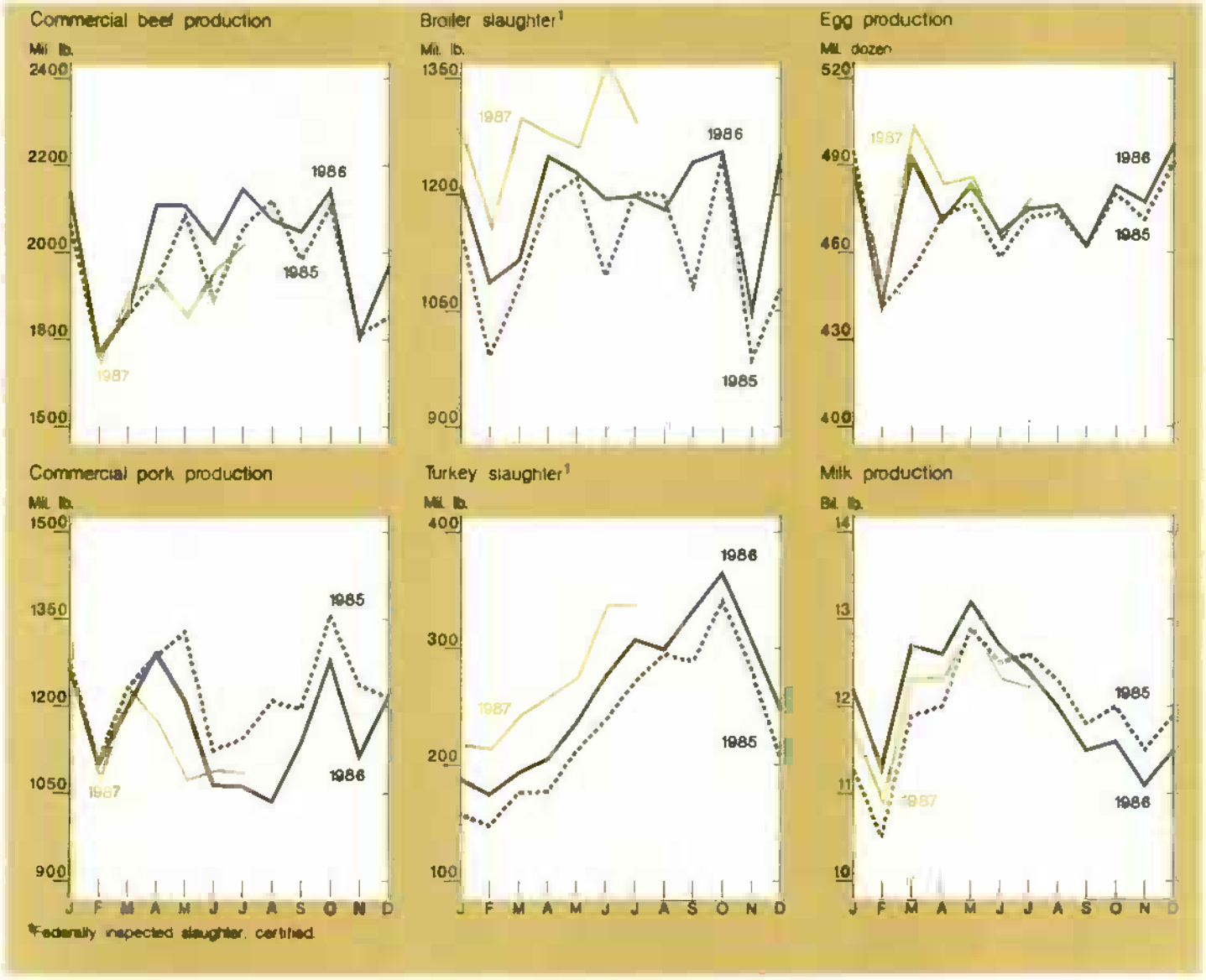
Broiler Output Continues Rolling

Broiler slaughter in the first half of 1987 was up 8 percent from last year. Broiler chicks hatched during May-July were up 7 percent, indicating that third-quarter production likely was 7-8 percent greater than last year.

Overall, second-half production is forecast to be more than 8.5 percent bigger than a year ago, and total 1987 production will be 8 percent greater. Estimated cumulative pullet placements in the broiler hatchery supply flock indicate that through February 1988 the flock will be about 14 percent above the previous year, suggesting that production will continue to increase. Production in 1988 is expected to be about 5 percent higher than in 1987.

The 12-city composite wholesale price for whole broilers averaged 52.63 cents per pound in August, up almost 6 cents from July, but well below the August 1986 price of 69.72 cents. With continuing large broiler supplies, third-quarter prices likely were in the 48-49 cent range.

Prices in October-December could average 42-46 cents, down from 56 cents during the same period last



year. In 1988, broiler prices are expected to average 40 to 46 cents.

Broiler exports in the first half of 1987 were up 29 percent from the same period last year. They are expected to be up about 35 percent for 1987 as a whole, because of increased exports to Japan, Hong Kong, Canada, Egypt, and Iraq. Sales to Egypt and Iraq are up because of the Export Enhancement Program.

Second-Half Turkey Production May Be Up 15 Percent

Turkey slaughter in January-June was up 20 percent over the first half of 1986. July poult placements for slaughter were 17 percent above a year earlier. Placements in March-July averaged 15 percent above a year before, indicating that second-half production may be up 15 percent over 1986. Production for all of 1987 is expected to be up 17 percent from 1986.

Production in 1988 may be up only 6-7 percent over 1987. It will slow because producers are likely to break even or even face losses during the last half of 1987 and first half of 1988.

Cold storage holdings on August 1 were up 22 percent over 1986. The 473 million pounds of stocks at the beginning of August were the largest in recent history. Record fourth-quarter beginning stocks are predicted—about 600 million pounds, 17 percent bigger than on October 1 a year ago. The larger stocks are expected to hold prices in the fourth quarter below those of a year ago.

The August New York price for turkey hens weighing 8 to 16 pounds was about 56 cents per pound, down from 78 last year. Third-quarter prices likely averaged 56-57 cents, while fourth-quarter prices are expected to be 54-58 cents. A year ago, prices were 80 cents in the third quarter and 78 in the fourth.

Prices during 1988 are expected to range from 51-57 cents per pound. First-quarter 1988 prices likely will

drop to 47-53 cents as efforts are made to reduce the large beginning stocks.

Declines in Dairy Output Are Coming to an End

Milk production during April-June declined about 3 percent from a year earlier. Cow numbers were down almost 5 percent because of the Dairy Termination Program (DTP), which ended August 31, 1987. Milk per cow rose about 2 percent from a year earlier, in response to heavier concentrate feeding.

Year-over-year declines in milk production have eased since early 1987, as the number of cows taken out of production by the DTP declined. Milk production was very close to a year earlier during July and increased 1 percent in August, as the slaughter and/or export portion of the DTP came to a close. Higher output per cow offset lower cow numbers.

For the rest of 1987, milk output probably will remain close to a year earlier. For all of 1987, production likely will be 1-3 billion pounds below 1986's 144.1 billion.

For further information, contact: Leland Southard, hogs; Mark Weimar or Larry Witucki, broilers, turkeys, and eggs; Ronald Gustafson, cattle; and Sara Short, dairy. All are at (202) 786-1830.

FIELD CROP OVERVIEW

Expectations for the world's grain and cotton crops in 1987/88 have diminished in recent months. Grain production is now expected to total 1,614 million tons, down 4 percent from 1986/87. Projections for all grain crops, most importantly for rice and coarse grains, were lowered in September, largely because of the growing impact of the drought in southern Asia. Except for rice, large stocks have cushioned the impact on world trade and prices.

For cotton, competitor production will be smaller than initially estimated, and prices are up sharply over last year. For oilseeds, it will be another year of record crops, low prices, and intense international competition for U.S. soybeans and products.

Wheat Crop Large Despite Lower Area

World wheat production in 1987/88 is forecast to fall 4 percent from 1986/87 to 506 million tons, but the crop is still the third largest on record. Total foreign production is down 5 percent to 448 million tons. The big crop, combined with large carry-in stocks, will ensure continued strong competition and low export prices.

Production in major importing countries is down 7 percent, with the Soviet Union accounting for nearly 14 million of the forecast 16.7-million-ton shortfall. Production in major foreign exporting countries is expected to decline about 3 percent. Low prices encouraged growers in Australia and Canada to reduce wheat plantings. Lower production in these countries will be partly offset by the 6-percent increase expected in EC output, as crops there recover after 2 years of lower production due to bad weather.

Although world wheat utilization is down because of less use in the USSR, it is forcast to exceed production for the first time since 1980/81, and world stocks will drop from the 1986/87 record of 146 million tons.

Total world wheat trade (July-June) is forecast at 94 million tons, 5 percent above 1986/87, but still 13 million tons below the 1984/85 record. Following last season's record crop, Canada had over 12 million tons of wheat in storage at the beginning of the year. These stocks should permit 1987/88 Canadian exports to nearly match 1986/87 shipments of 21 million tons. But Australia's stocks are much smaller than last year, and exports will drop with the smaller crop.

U.S. exports continue to expand with the assistance of Government programs. New U.S. initiatives extended under the Export Enhancement Program between July and the end of August include 1 million tons to China, 500,000 tons each to the Philippines, Poland, Egypt, and Morocco, and 300,000 tons each to Algeria, Brazil, and Colombia. U.S. shipments (July-June) for 1987/88 are expected to gain 18 percent to 33.5 million tons (1.2 billion bushels).

Asian Drought Cuts Rice Production

Developments in South and Southeast Asia dominate the 1987/88 rice outlook. The projected size of the world's rice crop was cut 3 percent in September and now stands at 305 million tons (milled basis), 6 percent below the preseason projections and more than 3 percent below 1986/87's crop. The late monsoon is expected to cut India's crop by 18 percent, and production estimates for most of the rest the region have also been reduced. Thailand, the United States' major competitor in world rice markets, is expected to see production drop another 8 percent from last year's poor crop.

Because of the small crop, Thai exports are projected to total only 2.5 million tons, 1.2 million below expected 1987 exports and nearly 2 million below the level of 3 years ago. Reduced world supplies of long grain rice have caused a sharp runup in world prices over the past month, and the U.S.-announced world price for long grain whole kernel rice jumped 28 percent to $7.90 per cwt between August 4 and September 15.

Limited exporter availability and higher prices are expected to cut the volume of world trade by 13 percent in calendar 1988, to 10.6 million tons. This will be the lowest world rice trade in a decade. The reduction in Thai

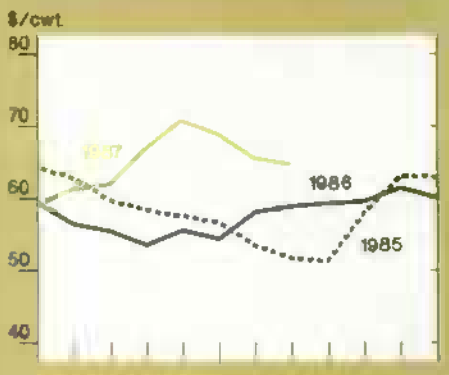
Generic Certificate Availability

Issuance	$ million
Actual issuances	
Deficiency & diversion payments 1/	7,823
Other 2/	1,556
Total	9,379
Authorized issuances (August-September 1987)	
1987 final diversion payments	394
1987 Conservation Reserve Corn Bonus Bonus	42
Export Enhance. & Targeted Export Assistance Programs	119
Total	555
Total, actual & authorized	9,934
Certificate exchanges (April 1986-August 26, 1987)	7,678
CERTIFICATE AVAILABILITY	2,256

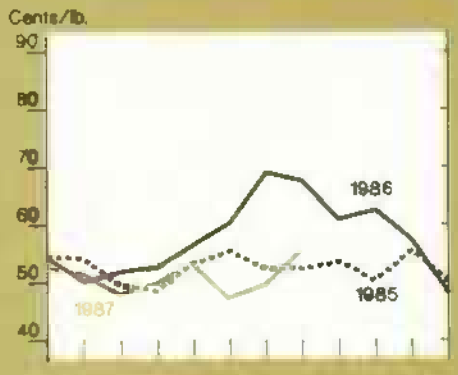
1/ Issued through July 31.
2/ Most issued through late July.

Commodity Market Prices

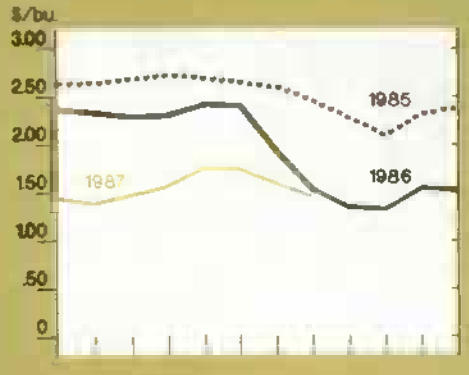
Choice steers, Omaha



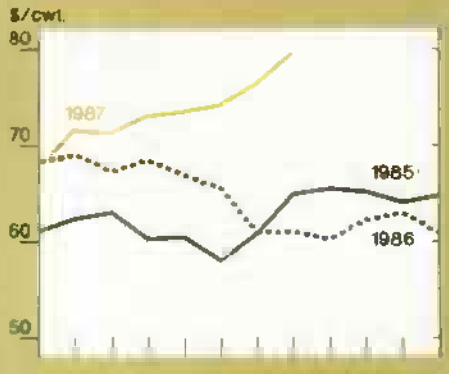
Broilers, 12-city average



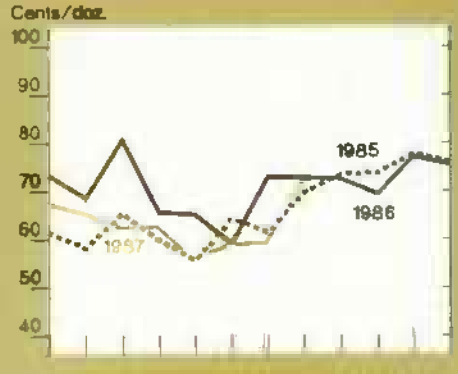
Corn, Chicago[3]



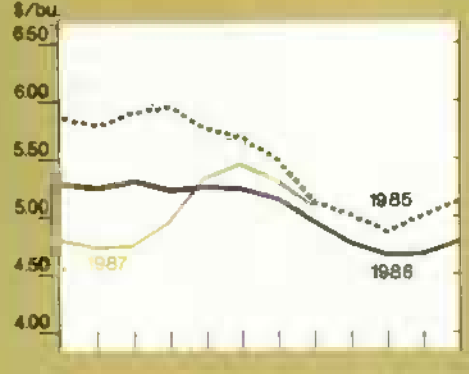
Feeder cattle, Kansas City[1]



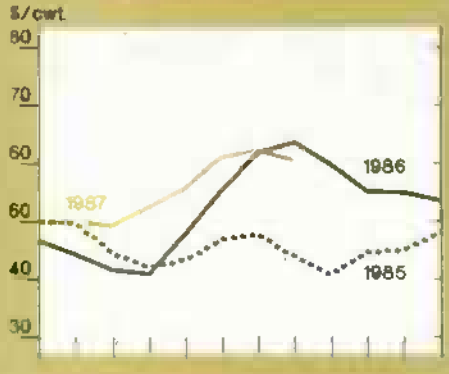
Eggs, New York[2]



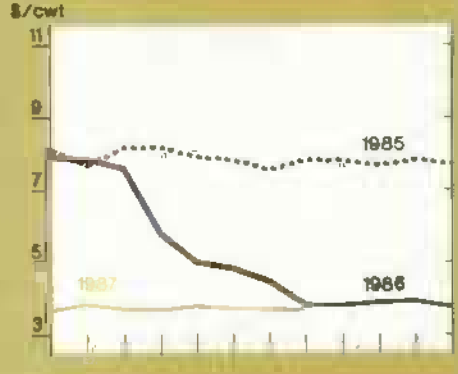
Soybeans, Chicago[4]



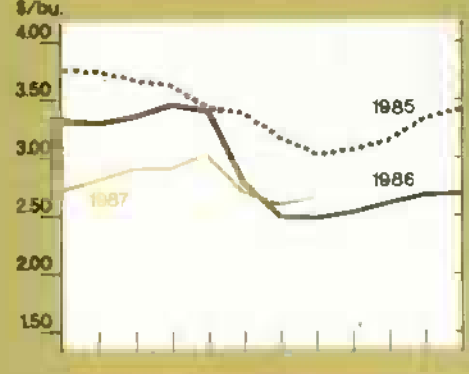
Barrows and gilts, 7 markets



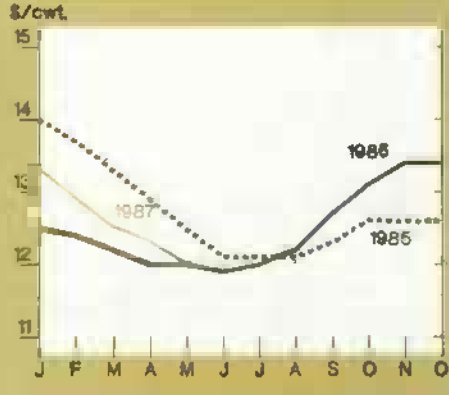
Rice (rough), SW Louisiana



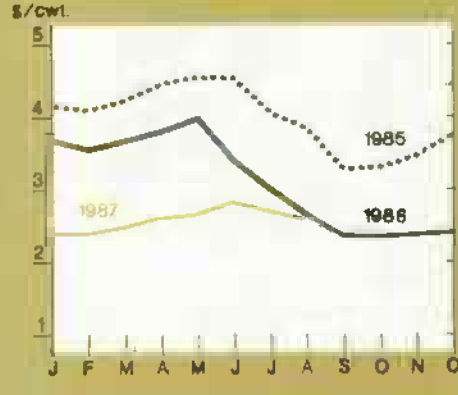
Wheat, Kansas City[5]



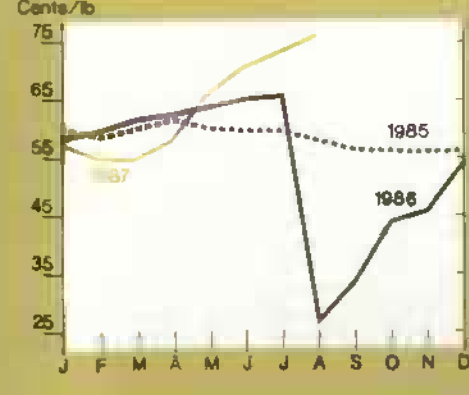
All milk



Sorghum, Kansas City



Cotton, average spot market



[1]600–700 lbs., medium no. 2. [2]Grade A Large [3]No. 1 Yellow [4]No. 2 Yellow. [5]No. 1 HRW.

rice availability is expected to mean a larger U.S. share of the world market, and U.S. exports during the 1987/88 rice marketing year (August/July) are expected to increase slightly to 82 million cwt because of expanded shipments of medium grain rice.

Coarse Grains Abundant

World supplies of coarse grains will remain abundant in 1987/88, despite a 4-percent drop in production. Carry-in stocks will set a record. U.S. production will slip again, but foreign production is expected to rise slightly to a second consecutive record. Lower world output, combined with the 2 percent utilization gain projected for the year, will mean slightly lower ending stocks.

World market prices will remain low, and trade will probably gain only slightly, as larger corn trade is offset by smaller trade in barley and sorghum. Expectations for world barley trade and U.S. exports have diminished following recent indications that Saudi Arabia, the largest importer, will cut barley import subsidies.

Foreign corn production is likely to be a record 267 million tons. China accounts for the largest share of the increase, but bigger crops are also expected in the USSR and Argentina. If the early forecasts for Argentina materialize, the country's exports should rebound sharply from this year's depressed levels. But this gain will be partly offset by lower Thai exports caused by the smallest Thai corn corp since 1978.

U.S. corn exports are likely to increase modestly to 41 million tons (1.6 billion bushels in the September-August U.S. marketing year). World trade in corn will probably increase only 2 percent to 58 million tons. Competition from low-priced feed wheat and barley is expected to remain strong.

Oilseed Output Sets Record

World oilseed production is expected to reach a record 202 million tons in 1987/88, on the strength of projected records for soybeans, rapeseed, and sunflowerseed. Brazil and Argentina, the major U.S. competitors, are together likely to increase soybean acreage by nearly 1 million hectares, continuing the past upward trend. Soybean and soymeal prices on world markets have dropped less in recent years than have grain prices, contributing to the growth in area.

World soybean trade during 1987/88 is expected to slip 7 percent to 27 million tons. Big stocks of vegetable oil, large foreign oilseed crops, and the recovery of palm oil production will limit world trade in soybean oil. India, the world's largest vegetable oil importer, will step up oil imports this year because the drought has cut peanut and soybean output sharply. But rapeseed and palm oils will account for most of the gain.

World soybean meal exports are forecast to remain at 25 million tons, about the same as in 1986/87, when trade jumped nearly 2 million tons because of larger Soviet imports. Soviet meal imports in 1987/88 are expected to remain at 2.4 million tons, just short of the 2.8-million-ton record of 1982/83. No U.S. meal has been shipped to the USSR since 1979.

Continued Strong Use Reduces Cotton Stocks

Ending stocks of both foreign and U.S. cotton will fall again, as projected 1987/88 world cotton consumption exceeds production by nearly 5 million bales. Production is forecast to reach nearly 78 million bales, 12 percent above the previous season. All the major producers will register gains this season, as yield recovers from poor 1986/87 weather and area expands partly because of higher world market prices at planting time.

Consumption in 1987/88 is projected just below the 1986/87 record, primarily because of reduced nonmill use in China. Additionally, the sharp gains in cotton prices may also slow consumption growth among foreign importers. Manmade fibers, which have recently lost popularity to cottons in industrialized markets, could gain in importance again as cotton prices rise.

The volume of world trade is projected to fall to 24 million bales, but remain the second highest ever, 5-percent under the 1986/87 record. Export competition from Pakistan, Australia, and several medium-size producers will continue strong. But other important foreign exporters, particularly China, the Soviet Union, and India, are expected to have tighter supplies and may reduce exports. As a result, U.S. exports are expected to rise again this year, reaching 7 million bales, 5 percent over 1986/87.

Yield Estimates Lowered For Most Field Crops

USDA lowered 1987 yield estimates for most major field crops in September. Wheat yields are forecast at 38.2 bushels an acre, because of lower-than-expected Durum and other spring wheat outturns. However, yields remain well above 1986/87's 34.4 bushels an acre. The domestic wheat crop for 1987/88 is expected to be 2.11 billion bnshels.

The rice yield was lowered slightly to 5,471 pounds an acre, leading to a drop in the production estimate to 126.8 million cwt. Lower production, combined with a 5-percent month-to-month drop in the carryin estimate to 55.1 million cwt. puts the 1987/88 domestic supply of rice at 184.3 cwt. Use estimates were unchanged, but forecast 1987/88 carryout now stands at 21.8 million cwt, equivalent to only 13 percent of expected annual use. Market prices for rice are projected to average $4.20 to $5.00 a cwt, due to the lowering of the world production estimate.

The U.S. corn yield estimate dropped from 121.4 to 119.9 bushels an acre, but is still record-high. The corn crop estimate was lowered 1 percent to 7.14 billion bushels. This, along with a slight increase in expected domestic use, puts the 1987/88 carryout at 4.56 billion bushels, the first decline since 1983/84. The average market price for corn in 1987/88 is expected to be $1.60 to $1.90 a bushel, compared with $1.51 in 1986/87, and will be heavily influenced by upcoming certificate issuances and the 1988 programs for corn and grain sorghum.

The U.S. soybean yield estimate was lowered from 34.7 to 34 bushels an acre, resulting in a 2-percent drop in the production estimate to 1.96 billion bushels. Also, the carryin estimate was reduced by 25 million bushels to 480 million. As a consequence, the 1987/88 carryout estimate was lowered by 12 percent to 480 million bushels, unchanged from 1986/87 and equivalent to 25 percent of expected annual use.

The U.S. average peanut yield estimate for 1987/88 was reduced by 7 percent to 2,572 pounds an acre. This led to a drop in the production estimate to 3.9 billion pounds, down from 4.15 billion a month earlier. Hot, dry weather in North Carolina and Virginia caused the reductions.

Cumulative Generic Certificate Exchanges as of August 26, 1987

Commodity 1/	CCC inventory	Producer loans	Total
Food grains			
Wheat			
Volume (mil. bu.)	198.0	357.7	555.7
Value ($ mil.)	481.8	870.8	1,352.6
Rice			
Volume (mil. cwt.)	37.1	0.03	37.1
Value ($ mil.)	127.1	0.12	127.2
Feed grains			
Corn			
Volume (mil. bu.)	165.0	3,259.4	3,424.4
Value ($ mil.)	273.9	5,410.4	5,684.2
Grain sorghum			
Volume (mil. bu.)	45.7	137.9	183.6
Value ($ mil.)	78.8	237.7	316.5
Barley			
Volume (mil. bu.)	36.1	88.0	124.1
Value ($ mil.)	47.5	116.0	163.5
Cotton			
Volume (mil. bales)	0.85	5.75	6.60
Rye, oats, soybeans			
Value ($ mil.)	10.3	23.4	33.7
Total value ($ mil.) 2/	1,019.3	6,658.3	7,677.7

1/ Other program commodities, for which few or no exchanges have been made, include honey, nonfat dry milk, butter, and cheese.
2/ Does not include values for cotton exchanges.

Source: Agricultural Stabilization and Conservation Service, USDA.

Quarterly Generic Certificate Exchanges and Farm Price Impacts

Commodity and item	June-Aug.'86	Sept.-Nov.'86	Dec.'86-Feb.'87	Mar.-May '87	June-Aug.'87 1/
Corn					
Bushels					
exchanged (mil.)	215	344	751	1,641	435
CCC inventory	39	24	14	45	40
Producer loans	176	320	737	1,596	395
Estimated farm price impacts (¢/bu.)	-10 to -20	0 to -5	-10 to -20	-20 to -25	-25 to -30
Wheat					
Bushels					
exchanged (mil.)	77	88	70	241	60
CCC inventory	32	4	8	117	28
Producer loans	45	84	62	124	32
Estimated farm price impacts (¢/bu.)	0 to -5	-5 to -10	0 to -5	-5 to -10	0 to -5

1/ Preliminary exchange data.

An exception was cotton, whose yield estimate was raised slightly to 616 pounds an acre. However, production was lowered from 12.91 to 12.85 million bales due to a decrease in expected harvested area. A smaller crop and a slight increase in domestic mill use is expected to lower 1987/88 from 3.8 million bales in August to 3.5 million, the lowest level since 1983/84's 2.78 million bales.

Certificate Activity Slows

Approximately $9.4 billion worth of generic certificates were issued through July, and another $555 million likely were issued through September 30. Through August 26, actual and potential issuances were valued at $9.93 billion and cumulative exchanges totaled $7.68 billion, leaving $2.26 billion of certificates available for exchange in coming months. USDA should issue up to $2 billion worth of additional certificates in October as 1986 final deficiency payments for corn and grain sorghum, and as Conservation Reserve Program (CRP) annual rental payments.

June-August certificate activity tapered off sharply after mid-June. Certificates were exchanged for only 60 million bushels of wheat from June through August 26, half from CCC stocks. Wheat exchanges during June-August lowered farm prices for wheat by 5 cents or less, similar to the estimated impact for June-August 1986. Unlike last year, when average monthly farm prices for wheat were below the $2.30 loan rate from July through October, if farm prices continue to remain above the 1987 loan rate of $2.28, growers will place less wheat under loan. Consequently, certificates will be used less often to immediately reacquire new-crop wheat placed under loan.

Certificate exchanges for corn also fell during June-August, but they should increase sharply as farmers place new-crop corn under loan. About 436 million bushels of corn were acquired with certificates from June through August 26. These exchanges are estimated to have lowered farm prices for corn by 25 to 30 cents during June-August. Without these exchanges,

free stocks would have tightened sufficiently to push corn prices above the loan rate. This would have induced farmers to redeem loans and thereby free up stocks. *[Michael Hanthorn (202) 786-1840 and Frederic Surls (202) 786-1691]*

For further information, contact: Sara Schwartz, world food grains; Allen Schienbein, domestic wheat; Janet Livezey, rice; Peter Riley, world feed grains; Larry Van Meir, domestic feed grains; Tom Bickerton, world oilseeds; Roger Hoskin, domestic oilseeds; Carolyn Whitton, world cotton; Bob Skinner, domestic cotton; Jim Schaub, peanuts. World information, (202) 786-1691; domestic, (202) 786-1840.

HIGH-VALUE CROP OVERVIEW

Fruit Supplies Generally Larger

Larger supplies of apples and pears will more than offset a smaller grape crop to drive this fall's fresh noncitrus fruit prices below a year ago. The U.S. apple crop forecast, a record 9.69 billion pounds, exceeds 1986 production by 23 percent. Pear production likely will surpass last year by 13 percent. Although the U.S. grape forecast is 3 percent below 1986, total noncitrus production, including major tree fruits and grapes, will likely rise 12 percent from last year.

Wholesale and retail prices for canned pears, peaches, and fruit cocktail will probably remain firm during 1987/88. Although large packs are expected, depleted carryover stocks from 1986/87 will hold down total supplies. Lower contract prices and a larger pack likely will weaken canned apple product prices in 1987/88. Strong demand probably will raise raisin prices.

August 1 frozen cherry and strawberry stocks rose sharply from a year earlier. The tart cherry crop exceeded 1986 by 62 percent, and strawberry deliveries to freezers rose substantially. Ample supplies of frozen fruits and berries will push prices below year-earlier levels.

Citrus groves in Florida and Texas continue to recover from the devastating freezes of the early 1980's. Adequate summer rain put most groves in good-to-excellent condition and the fruit is developing nicely for the 1987/88 harvest. Supplies of processed citrus juice will likely rise during 1987/88, keeping prices steady.

Processing Vegetables, Dry Bean Production To Rise

Production of the 4 major processing vegetables (snap beans, green peas, sweet corn, and tomatoes) stands at 11.2 million tons, up 4 percent from last year. In 1986, contract output accounted for 99 percent of total production. This year's harvested area exceeded 1986 acreage by 5 percent. The forecast of sweet corn for processing, at 2.7 million tons, exceeds last year's production by 8 percent. Contracted tomato production is forecast at 7.5 million tons, up 2 percent from 1986.

The 1987 dry bean forecast, at 24.7 million cwt, exceeds last year's production by 8 percent. Area for harvest rose 13 percent from last year to 1.7 million acres. The average yield is forecast at 1,460 pounds per acre, down 72 pounds from last year.

Sugar Deliveries Gain in 1986/87

U.S. sugar deliveries will likely rise 2 percent in 1986/87 to 7.95 million tons. Deliveries for the first three quarters of fiscal 1986/87 stood at 5.9 million tons, raw value, 3 percent higher than the same period a year earlier. This is the first year-over-year increase in U.S. sugar deliveries in 10 years.

Calendar 1987 sugar consumption is estimated at 8.1 million tons, raw value, 3 percent above the previous year. The increase in deliveries is due to growth to the bakery, cereal, and confectionery sectors, and a slowdown in HFCS substitution for sugar.

July 1 U.S. sugar stocks held by primary distributors, including those owned by Hawaiian processors, fell 2.5 percent from a year earlier, to 2.476 million tons. Beet and mainland cane processors' stocks rose 13.7 and 11.4 percent, respectively. But, CCC stock declines and smaller cane sugar refiner holdings more than offset these increases and pushed total stocks lower. For the first time since second-quarter 1985, the CCC has no sugar stocks.

1987 Tobacco Production Up

Tobacco production will rise about 6 percent to an estimated 1.23 billion pounds in 1987. Larger effective quotas helped boost both flue-cured and burley production. Big reductions in dark fire-cured and dark air-cured acreage allotments contributed to sharp production declines for these types.

Flue-cured auction prices through the first 6 weeks of the 1987 tobacco season averaged 3 cents a pound higher than a year ago. About 4 percent of 1987 flue-cured tobacco had been taken under loan as of September 10. In 1986, about 5 percent of the crop was under loan by this date. A relatively good-quality crop and smaller total supplies helped boost growers' prices. In addition, domestic manufacturers have committed themselves to using more U.S.-grown tobacco in cigarettes. *[Glenn Zepp (202) 786-1767]*

Upcoming Economic Reports

Summary Released — **Title**

October

8	World Ag. Supply & Demand
9	Econ. Indicators of the Farm Sector
19	Agricultural Outlook
20	Dairy
	Foreign Ag. Trade of the U.S.
23	World Food Needs & Availabilities Update
29	Oil Crops
30	Econ. Indicators of the Farm Sector

November

4	Livestock & Poultry
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13	Cotton & Wool
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18	Agricultural Outlook
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Commodity Spotlights

More Forage for Fewer Cattle

Forage conditions this year are good in almost all areas, particularly compared with the poor conditions in many places in 1982-86. Drought hit much of the Southern Great Plains in 1982-84 and the Southeast in the summer of 1986. Drought and poor forage conditions were also troublesome in parts of the West, most notably this past summer in the Pacific Northwest and California.

Pasture and range feed conditions on September 1 were rated 76, 3 points below a year ago but 3 above the 1976-85 average. While conditions are very favorable in most areas, the drought in the far Western states continues. Parts of the Southeast have also been dry, but recent rains should provide needed moisture to establish small grain pasture for fall and winter grazing.

Figures on the land base and on shifts between cropland and cropland pasture are based on Agricultural Census data, as are actual acreage of pasture and rangelands. The last Census covered 1982; the next enumeration will occur in early 1988 for 1987. In addition to the 1982 Census data, indications of land use trends are provided by acreage planted to principal crops, set-aside acreage, and the new Conservation Reserve Program data.

Cropland pasture is the most productive pasture land, and stocking rates may be about 2 to 4 acres per cow unit. Some of the rangeland grazed requires as much as several hundred acres per cow in the more arid areas. Acres of cropland pasture expanded until about 1972, as relatively attractive livestock returns shifted resources from cropping. However, beginning in 1972, U.S. exports burgeoned and grain prices began to rise. This resulted in a drop in cropland pasture from about 90 million acres in the early 1970's to 65 million in 1982.

Grassland pasture and range acreage, which serves as the primary resource base for the beef industry, likely has been stable since 1969. Forestland grazed likely has declined about 40 million acres, but total carrying capacity is seasonal and limited compared with the smaller but vastly more productive cropland pasture.

Planted plus idle cropland area has remained at 370 to 373 million acres since 1982. It is likely that cropland pasture acreage has been fairly stable or has declined slightly. Total forage acreage likely has declined at least modestly since 1982.

Even if total acreage has fallen, the decline in the cattle inventory since 1982 has resulted in more forage available per head. The total cattle inventory was 115.4 million head in 1982, but it had declined to 102 million by the beginning of 1987, and may reach about 100 million in early 1988.

The beef cow inventory declined 5 million head during 1982-87, while the combined beef and dairy cow herd declined 6 million head. The cow herd decline of 12 to 14 percent has resulted in relatively large supplies of forage.

Cattle herd liquidation over the last 5 years has largely ended in 1987, but expansion is not likely until at least 1988. However, a 4-percent reduction in beef production in 1987 has already resulted in fed cattle prices rising to an average of more than $6 per cwt above a year ago. These higher prices, plus a 30-percent drop in feed costs, have brought in a strong demand for the reduced supply of feeder cattle. Prices for stocker-feeder cattle in various weight groups at Kansas City show increases of $9 to $13 per cwt over 1985-86 averages.

Many cattle are remaining on pasture for additional weight gain. A strong demand for even the heavier and likely fleshier feeder cattle is evidenced by recent market data; feeder steers

Post-Census Data on Cropland and Forage Base

	Cropland					Grazing Land				
Year	Principal crops planted 1/	Total idled 1/	Conservation reserve 1/	Planted plus idle acres 1/	Cropland not pastured 1/	Cropland pastured 1/	Grassland pasture and range 2/	Subtotal 2/	Forestland grazed 2/	Total 2/
				Million acres						
1964					387	57	640	697	225	922
1969					384	88	604	692	198	890
1974					382	83	598	681	179	860
1978					395	76	587	663	172	835
1982	359	11		370	404	65	597	662	158	820
1983	310	78		388						
1984	345	27		372						
1985	342	31		373						
1986	328	42	2	372						
1987	304	70	23	397						

1/Crop production data since the 1982 Census. 2/ Specialized Census.

Cattle Inventory, January 1

Year	Total cattle	Total cows	Beef cows	Grazing acreage
		1,000 head		1,000 acres
1964	107,903	47,966	31,908	922,002
1969	110,015	48,040	35,490	890,000
1974	127,788	54,478	43,182	860,000
1978	116,375	49,635	38,738	835,000
1982	115,444	50,216	39,230	820,000
1983	115,001	48,986	37,940	
1984	113,700	48,603	37,494	
1985	109,749	46,174	35,370	
1986	105,468	44,810	33,632	
1987	102,031	44,457	33,910	

Hay Acreage, Production, and Supplies

Year	Hay acreage harvested	Hay production	Hay stocks	Available supplies	Supplies per cow	Hay area per cow
	1,000 acres	- - - 1,000 tons - - -			Tons	Acres
1974	60,198	134,217	25,353	159,570	3	1.10
1978	62,113	143,817	24,184	168,001	3	1.25
1982	59,812	149,241	24,981	174,222	3	1.19
1983	59,717	140,764	28,118	168,882	3	1.22
1984	61,445	150,648	20,148	170,796	4	1.26
1985	60,423	148,601	26,853	175,454	4	1.31
1986	62,274	155,271	26,698	181,969	4	1.39
1987	60,203	150,798	32,359	183,157	4	1.35

weighing 700 to 800 pounds were priced over $80 this summer, compared with a $62 average in 1985/86.

Stocker-feeder demand will probably remain strong this fall. However, this fall and in 1988, larger supplies of competing meats, particularly pork, are likely to hold down prices for beef. Choice slaughter steer prices may be in the middle $60's, compared with the averages in the low $70's in late spring-early summer.

In addition to the favorable grazing conditions, large hay stocks and millions of acres of idled cropland provide a sizable reserve to guard against deteriorating forage conditions. Cattlemen enter the winter supplementary feeding period this fall with record total hay supplies. Alfalfa hay supplies are somewhat tight because of poor growing conditions in the Lake States, but large supplies of grass hay should be more than adequate for the reduced beef herd in most areas.

Although likely not needed, the 70 million acres of acreage reduction and paid land diversion area may be grazed during the 7 nongrowing months—October to April in most areas—after notification of the State ASCS Committee. Little of this acreage is fenced or likely to be utilized, unless it becomes available for an extended period of time, which is not likely. However, this acreage does provide an excellent emergency source of grazing or hay if drought were to sharply reduce forage supplies again, as in 1982-84. *[Ron Gustafson (202) 786-1830]*

Early Plantings Help Boost 1987 Yields

For U.S. crop production, the 1980's probably will be remembered as a decade of extremes. Thus far, each year has seen record yields for at least one major field crop, with the exception of 1980 when there was a serious drought. Even in 1983, also a drought year, the U.S. average wheat yield was a record 39.4 bushels an acre.

National average yields for corn and grain sorghum are expected to reach record highs this season, and soybean yields will be close to 1985/86's record. Yields are strong because these crops were planted early, rains were timely, there were few sustained periods of hot weather, and acreage idled in commodity programs (usually the least productive land) was up sharply.

A rule of thumb in the Corn Belt suggests that corn yields are reduced by 1 bushel for each day planting is delayed beyond early May. It is difficult to validate such a rule using national time-series data on planting progress and yields, but they do suggest a relationship. From 1985 to 1987, 26 to 34 percent of the corn crop was planted by May 3, compared with a 1974-87 average of 22 percent. U.S. corn yields have been record high the past two seasons.

During 1974-87, corn yields averaged 101 bushels an acre, with a standard deviation of about 16 bushels. In years when the yield was within 1 standard deviation of the 1974-87 mean, farmers planted an average of 19 percent of the crop by May 3. In years when the corn yield was more than 1 standard deviation above the mean, an average of 30 percent of the crop was in by May 3. The share of the crop planted in years with abnormally low yields, however, was about the same as in years when yields were normal.

Nevertheless, there were exceptions to this tendency. In 1974, 31 percent of the corn crop was planted by May 3, but hot, dry weather during the season led to a low corn yield of 72 bushels. In 1979, only 10 percent of the crop was planted by May 3, but the yield was a then-record 110 bushels

Because of the frequency of exceptions and the short time series, statistical analysis of factors affecting corn yields, including acreage, fertilizer use, and technology, shows no significant relationship between yields and planting progress.

But, the relationship holds when analyzing data among States for one year. For example, a recent USDA analysis of 1980 farm-level data for the 10 major producing States showed that corn yields were reduced by 0.6 bushel an acre for each day planting was delayed beyond early May.

Relationship Between Yields & Time of Planting, 1974-87

Crop	1974-87 yield: Mean	Std.dev.	When the average yield is: More than 1 standard deviation below mean	Within 1 standard deviation of mean	More than 1 standard deviation above mean
	Bu./acre		Percent of crop planted		
Planted by May 3					
Corn	100.5	15.6	20	19	30
Other spring wheat	30.2	4.0	59	35	53
Planted by May 10					
Corn	100.5	15.6	36	41	58
Other spring wheat	30.2	4.0	62	53	73
Planted by May 17					
Soybeans	29.7	3.35	18	18	27

The Rule is Weaker for Wheat...

For spring wheat, the share of crop planted early has been much more volatile than for corn. This is probably because spring wheat is planted further north than most of the U.S. corn crop and therefore is more subject to early weather variability. From 1974 to 1987, an average of 43 percent of the spring wheat crop was planted by May 3, with a standard deviation of over 24 percentage points.

In years when the U.S. average yield for other spring wheat was within 1 standard deviation of the 1974-87 average of 30 bushels, 35 percent of the spring wheat crop was planted, compared with 59 percent when yields were very low and 53 percent when yields were very high.

But, as with corn, there have been exceptions where good (bad) weather at planting has been offset by adverse (favorable) weather later in the season. In 1978, only 10 percent of the spring wheat crop was in the ground by May 3, but the national average yield for other spring wheat was 30 bushels an acre. And, in 1980, 53 percent of the crop was planted by May 3, but the average yield was only 25 bushels.

...But Stronger for Soybeans

For soybeans, there is a statistically significant relationship over time. From 1974 to 1987, the soybean yield was one-quarter-bushel higher for each 1-percent increase in plantings by May 17. These findings can be explained partly by regional differences in productivity and planting progress.

About three-fourths of the U.S. soybean area is in the 13 Midwest States, where yields have averaged 38 bushels an acre the past 3 seasons. On the other hand, about 20 percent of U.S. soybean area is planted in the 8 major producing States in the South, where yields have averaged 21 to 25 bushels an acre in recent years.

Midwest farmers generally plant soybeans earlier than farmers in the South. With significantly lower yields and later plantings in the South, most early planted soybean area is located in the more productive Midwest. This helps explain the stronger positive correlation between early plantings and yields.

The upshot is that even though a relationship is commonly accepted between early plantings and yields for corn and other spring wheat, it is difficult to analyze over time, particularly without accounting for weather during the growing season. *[Michael Hanthorn (202) 786-1840]*

Sugar Production Up, Imports Down

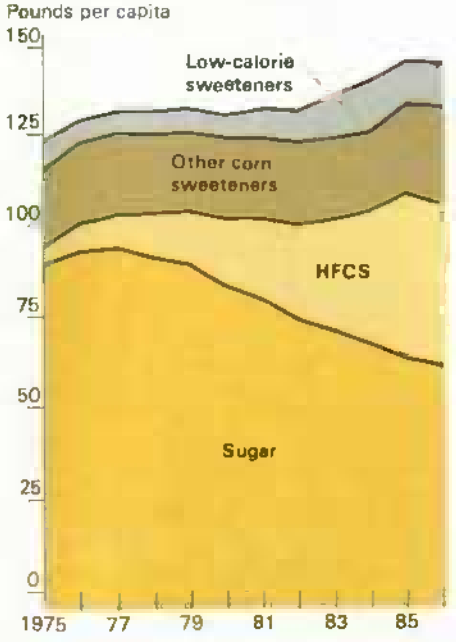
The U.S. sugar industry is undergoing major changes. Production is up sharply and imports have been drastically reduced. Substitute sweeteners and imports of sugar-containing products have trimmed the demand for sugar. Although sugar use in 1987 appears to be on the rebound, sugar's relatively high price continues to pose longer-term limits to consumption.

Sugar provisions in the 1985 Food Security Act continued price support at a minimum 18-cents-a-pound loan rate, and required that market prices be sufficiently above the loan rate to avoid nonrepayment of loans. In effect, the 1985 act mandated prices at no less than those of the 1981 Farm Act, and more likely above. Prices for raw sugar averaged 21.0 cents a pound in 1982-86, annually never averaging below 19.9 cents. September 1987 prices are about 21.8 cents a pound.

U.S. prices are far above world prices, which averaged 6.4 cents a pound (f.o.b. Caribbean) in 1982-86. World prices do not reflect the cost of producing sugar, because subsidies are widespread. A more useful comparison for U.S. sugar prices is the cost of producing sugar in the major exporting countries—estimated at less than 16 cents a pound.

High U.S. sugar price supports, and less attractive returns for alternative crops, have encouraged a remarkable increase in sugar production. From an average 5.9 million tons, raw value, in fiscal 1982-1986, U.S. sugar output escalated to 6.7 million tons in 1987. It is forecast at 7 million tons in 1988. Good weather and better seed

Consumers Using More Sweetener, But Less Sugar



varieties have helped, but the major boost has come from expanded acreage. The 1987/88 season's estimated area for harvest, up from last season, indicates an increase of 13.5 percent for sugarbeets and 8.8 percent for sugarcane (excluding that grown for seed) above the 1981/82-1985/86 average.

Beet Sugar To Rise 6 Percent

Beet sugar output is forecast at 3.6 million tons, raw value, up nearly 6 percent from 1986/87 and 20 percent from 1985/86. Cane sugar output is forecast at 3.4 million tons, above last year's record 3.3 million.

Further expansion depends largely on processing capacity. Despite the price stimulus, no new processing plants are likely to be built because they incur heavy capital cost. Still, relatively low-cost incremental improvements are being made, and some additional production can be accommodated.

Rising production and declining sugar consumption combined to erode U.S. sugar quota imports to 1.2 million tons in fiscal 1987 (1 million tons for calendar 1987). In 1985, quota imports exceeded 3 million tons, and in 1981, just before restrictive quotas were imposed, imports were nearly 6 million tons.

Despite the premium price received for quota sugar, exporters' revenues have collapsed. This has focused special concern on Caribbean Basin Initiative (CBI) countries. A bill is pending in Congress to guarantee CBI countries no less than their fiscal 1983 quotas—a total of 1.2 million tons. However, depending on the 1988 U.S. sugar supply and use balance, such a quota may not be in the best interests of domestic producers.

Sugar imports have shrunk not only because of rising domestic production but because sugar has been replaced in many uses by lower cost, lower priced high fructose corn syrup (HFCS). Advances in enzyme technology, low corn prices, and guaranteed high prices for sugar gave HFCS an enormous price advantage.

From a peak of 11.1 million tons in 1977, sugar use declined to 7.86 million tons in 1986, while HFCS rose from a million tons, dry basis, to 5.5 million. However, with HFCS now accounting for 42 percent of total sugar-HFCS consumption (close to the current maximum substitutability), the era of massive sugar displacement by HFCS is nearly over.

Sugar Use Climbing For First Time in Decade

In first-half 1987, U.S. sugar deliveries were up 5 percent from last year, mainly from increased demand in confectionery and bakery/cereal products, and also in wholesale (partly to get inventories up to normal). For the first time in 10 years, sugar use is forecast to rise in 1987, possibly 3 percent.

As a result of the improved outlook for use, the threat of another large drop in the sugar import quota appears to have abated, at least for a while. Still, other concerns continue. While the U.S. sugar program has benefited sugar producers and processors, and especially corn sweetener producers, U.S. sugar refining companies (dependent substantially on the refining of raw sugar imports) have suffered heavy losses.

Included in the Trade Bill is a provision to extend the "draw-back" of duties and fees earlier paid by refiners as far as October 1, 1977. This extension would assist refiners but cause problems with the General Agreement on Tariffs and Trade (GATT) and cost the Treasury as much as $350 million.

Imports of sugar-containing products have risen spectacularly—about 150 percent since fiscal 1982. This is the equivalent of an annual inflow of at least 300,000 tons, about 30 percent of the 1987 sugar import quota. The imports slowed down recently. However, as long as a wide gap continues to exist between world and U.S. prices, manufacturers with access to world-priced sugar will have a big advantage over U.S. manufacturers of sugar products. Such an advantage gives a powerful incentive for U.S. companies to relocate production facilities outside U.S. borders or in foreign trade zones.

Quotas have been imposed on products such as unsweetened cocoa, pancake flour and flour mixes, and certain edible preparations, but a wide assortment of products, difficult to control by quotas, continues to enter the United States. The General Accounting Office is preparing a report on sugar-containing products, and the International Trade Commission is investigating sugar-product manufacturers in foreign trade zones. In addition, the pending trade bill calls for a study to determine whether imports of sugar-containing products are materially interfering with the operation of the U.S. sugar program.

Future sugar consumption may be undermined as support prices continue to invite product imports and the development of new sweeteners in competition with sugar. Manufacture of a dry crystalline fructose for industrial uses (not just a minor health food) started in the summer. Competition of this corn-derived sweetener with sugar is still limited, but is anticipated to grow as production costs decline.

Other sweeteners, including low-calorie types that are awaiting approval for U.S. use, pose a longer term and less easily defined challenge to sugar. Use of low-calorie sweeteners (especially aspartame) has risen rapidly the last several years, and accounts for over 13 percent of all sweetener use in the United States, up from 6 percent in 1980. However, caloric sweetener consumption also increased in that period. Overall per capita sweetener use rose more than 10 percent. *[Robert Barry (202) 786-1769]*

Upcoming Releases from the Agricultural Statistics Board

The following list gives the release dates of the major Agricultural Statistics Board reports that will be issued by the time the November *Agricultural Outlook* comes off press.

October

1	Egg Products
2	Poultry Slaughter Dairy Products
5	Cherry Utilization
6	Celery
8	Crop Production
9	Vegetables
13	Turkey Hatchery
15	Milk Production
20	Catfish
22	Eggs, Chickens, & Turkeys
23	Cold Storage Cattle on Feed; Livestock Slaughter
28	Peanut Stocks & Processing
29	Rice Stocks
30	Agricultural Prices

World Agriculture and Trade

EXPORT OUTLOOK

The forecast for U.S. agricultural exports in fiscal 1987 has been raised to $28 billion and 129 million tons. Export value as of August is expected to rise $1.7 billion above 1986.

Grains account for virtually all of 1987's expected 18-percent rise in volume. Lower U.S. prices, reduced competitor supplies, and the Export Enhancement Program are increasing the U.S. share of world grain trade.

However, lower prices are offsetting virtually all the expected volume gains in grain. Instead, most of 1987's expected value increase will come from bigger livestock, horticultural, and cotton exports. U.S. high-value exports have benefited from a less expensive dollar and export promotion activities under the Targeted Export Assistance Program (TEA). U.S. agricultural exports are also expected to be up on a net basis in fiscal 1987.

Agricultural imports in 1987 likely will reach $20.5 billion. Import value is expected to be down from 1986 because of a substantial decline in coffee prices since last year. The U.S. agricultural trade surplus will probably climb to $7.5 billion in 1987.

U.S. agricultural exports are expected to increase again in fiscal 1988, gaining in both value and volume. Volume will rise as the U.S. retains its larger share of world grain markets and world grain trade increases. The volume increase in 1988 will probably not be as large as in 1987. Export value could rise faster than volume, as prices improve for bulk exports and sales of high-value products continue expanding.

Most of 1987's gain in volume has been in coarse grains, as competitors' supplies have weakened. Dry weather in Argentina reduced the corn available for export by about 4 million tons from a year ago, while production problems in Australia and Thailand reduced coarse grain exports from those countries to the lowest in the last 4 years.

In China, continued strong gains in grain consumption have begun outpacing production, forcing a decline of 5 million tons in the country's net coarse grain exports this year. The United States is gaining not only by increasing its grain sales to China's customers, but also by exporting to China itself, perhaps doubling total agricultural exports there in 1987.

U.S. wheat and flour exports for 1987 are forecast at 30.4 million tons and $3.1 billion. Large sales of U.S. wheat under the EEP are going to the Soviet Union (4 million tons) and China (1 million tons). Increased U.S. wheat sales will more than offset lower Soviet coarse grain purchases, and the volume of U.S. grain exports to the Soviet Union is expected to rise even if exports fail to reach the minimum total specified in the U.S.-USSR Long-Term Agreement.

The outlook for U.S. oilseed and product exports has improved. World soybean meal trade is greater than had been expected; Soviet imports are rising and consumption is increasing in the EC. U.S. oilseed and product exports are forecast at $6.2 billion. Movements of soybeans and soybean meal have been larger than earlier expected. Supplies in South America tightened because Brazil closed soybean export registrations.

Horticultural exports and livestock product exports are each expected to rise $500 million in 1987. In contrast to grains and soybeans, prices have generally been higher for these high-value products. Volume has also risen.

Livestock exports have been boosted by EEP sales of poultry meat and beef sales to Brazil under the Dairy Termination Program. Sales to Japan and Canada are higher as well. Similarly, horticultural exports have been supported by promotion efforts under the TEA, but most of the gains have been to countries with favorable exchange and growth rates.

U.S. cotton exports are estimated at 1.5 million tons and $1.7 billion, about $1 billion above 1986. A combination of competitive U.S. prices, reduced foreign export availability, declining world stocks, and strong foreign import demand boosted U.S. cotton exports to all major U.S. markets. Export volume in fiscal 1987 will triple last year's poor showing.

U.S. Sales to EC Up

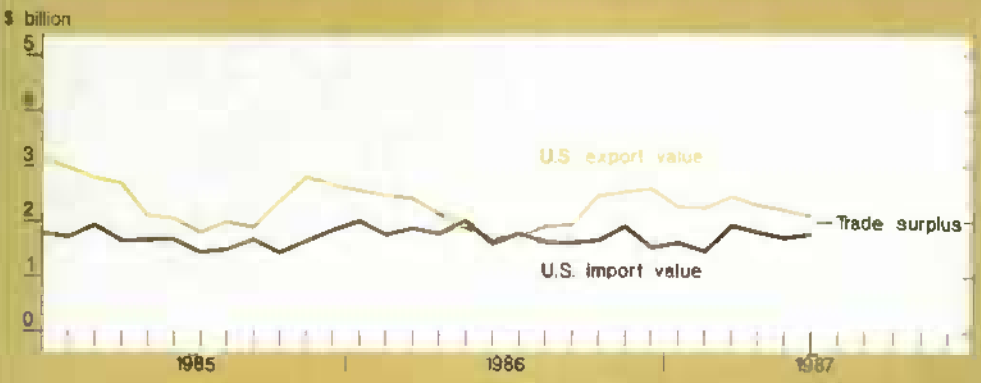
Farm product exports to Western Europe are expected to climb to $7 billion this year, as sales to the EC rise for the first time in 5 years. Since 1981, U.S. exports to the EC have fallen an average of almost $1 billion a year, largely because of reduced grain sales.

U.S. exports have risen in fiscal 1987, despite sluggish compound feed production and slower economic growth in the EC. Increased market share has raised U.S. soybean and soybean meal exports to the EC despite the 800,000-ton increase in EC oilseed production and falling total imports. U.S. cotton sales have largely rebounded in 1987 and high-value exports have continued growing.

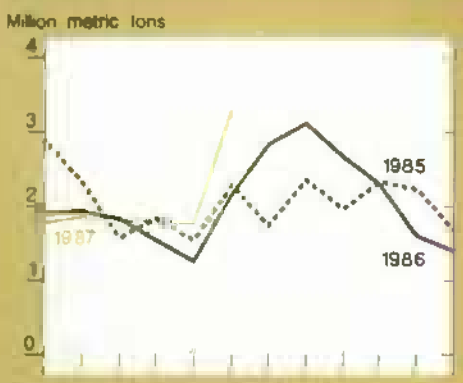
Coarse grain sales to the EC are forecast lower, but years of competition with EC-produced grains have reduced the importance of coarse grains in U.S. exports to Western Europe. In 1977, when U.S. corn sales to Western Europe peaked, coarse grains accounted for 30 percent of the value of U.S. agricultural exports to the region. In 1986, only 5 percent of the $6.8 billion the United States exported to the region was coarse grains.

U.S. Agricultural Trade Indicators

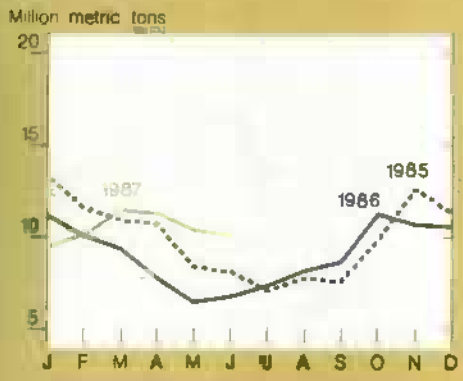
U.S. agricultural trade balance



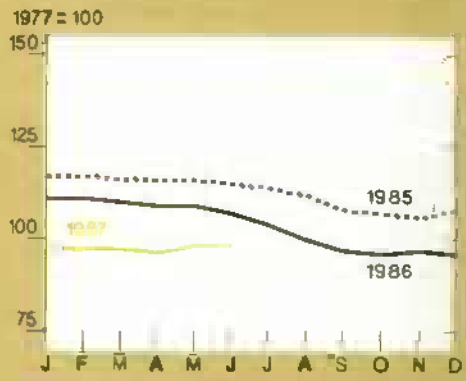
U.S. wheat exports



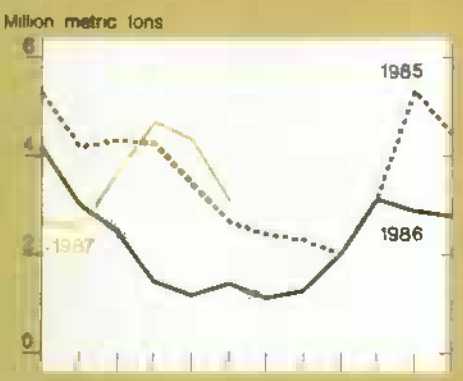
Export volume



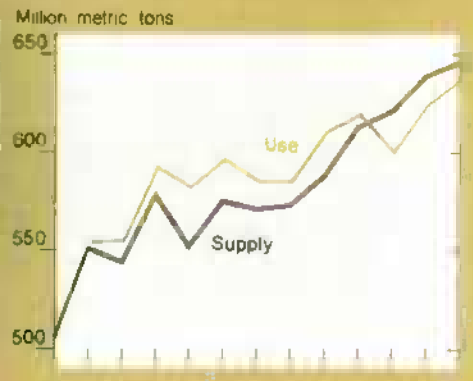
Index of export prices



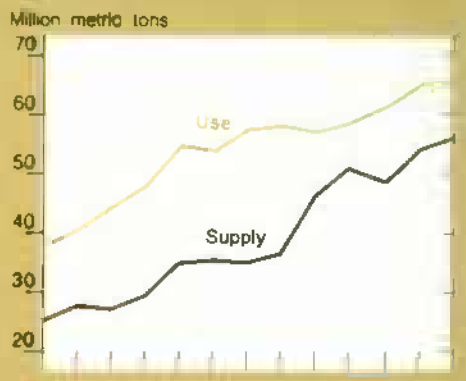
U.S. corn exports



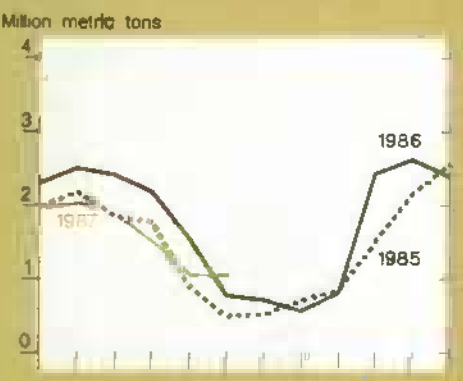
Foreign supply & use of coarse grains



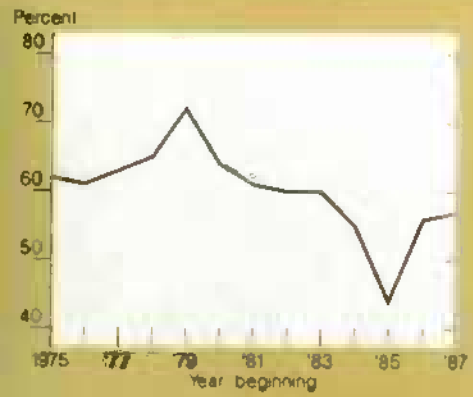
Foreign supply & use of soybeans



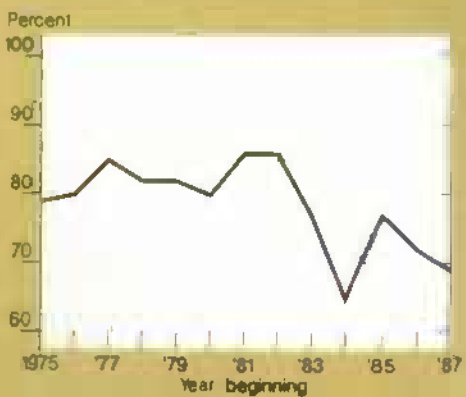
U.S. soybean exports



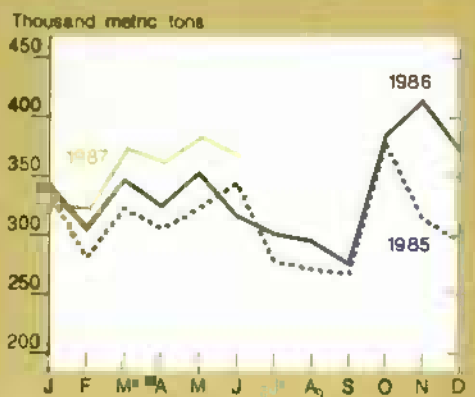
U.S. share of world coarse grains exports[1/2]



U.S. share of world soybean exports



U.S. fruit & vegetable exports[3]



1/ Excluding intra-EC trade 2/ October-September years 3/ Includes fruit juices.
Note: Wheat, corn, soybean, and cotton exchange rates and export unit values are now included in the U.S. Agricultural Trade tables at the back of this issue

Reduced sales to Spain and Portugal account for all of the drop in 1987 coarse grain exports to the EC. Exports to the rest of the Community rose about 500,000 tons during the first 9 months of fiscal 1987. The first U.S. sale to Spain under the U.S.-EC compensation agreement did not occur until July, limiting the agreement's impact on the year.

U.S. Export Value to Japan Is 7 Percent Higher

Increased U.S. grain, cotton, and meat sales to Japan will boost the value of U.S. agricultural exports about 7 percent in fiscal 1987, to $5.5 billion. U.S. coarse grain exports will climb as lower competitor supplies increase the U.S. market share. However, Japan's total coarse grain purchases are not expected to rise this year; formula feed production probably will edge up only 2 percent. The expected increase in the volume of U.S. coarse grain exports to Japan is likely to be offset by lower prices.

In 1986, Japan's livestock production expanded only 2 to 3 percent; meat imports rose briskly in response to the stronger yen and to reduced chicken meat tariffs. During 1987, growing Japanese demand for livestock products has again been met largely through imports rather than domestic production.

During October-June 1987, the volume of Japan's beef, pork, and poultry meat imports from all sources rose 26 percent, with the United States accounting for more than a third of that increase. During the same period, total coarse grain imports rose only 2 percent and soybean imports fell 3 percent.

Exports to Canada Rebounding

U.S. agricultural exports to Canada are rebounding in fiscal 1987, after falling the previous 2 years. Even as U.S. imports of agricultural products from Canada grew, exports of every major U.S. farm product sold to Canada gained substantially during the first 9 months of fiscal 1987.

U.S. corn exports to Canada nearly doubled during the first 9 months, despite a Canadian countervailing duty on U.S. corn. Canadian processors are eligible for a duty drawback if the corn is processed and re-exported. Much of the U.S. corn is made into high-fructose corn syrup and exported back to the United States.

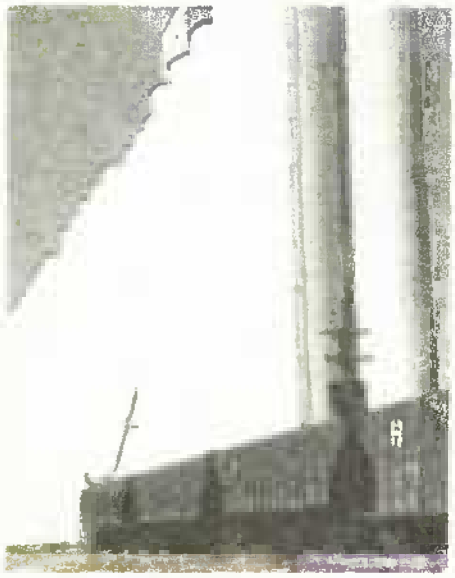
U.S. animal product exports rose as lower Canadian cattle slaughter reduced beef supplies; Canadian poultry production also continues to lag behind growing domestic demand. Apple production problems in Canada last year, and weaker competition from French and Chilean apples, boosted U.S. apple sales to Canada.

U.S. East Asia Trade Booming

One of the largest regional increases expected in fiscal 1987 is in sales to Taiwan, South Korea, and Hong Kong. U.S. exports to the region could rise $500 million to $3.3 billion. Booming export demand for the region's products continues despite some appreciation of Taiwan's currency and, to a lesser extent, South Korea's. The region's textile and leather product exports have meant growing cotton and hide imports from the United States, while strong, export-led growth has spurred increased livestock feeding.

Taiwan's pork exports to Japan expanded 24 percent in 1986 and accelerated during fiscal 1987. Livestock production was boosted by the growing popularity in Taiwan of western-style fast food, first introduced in 1984. Beef and broiler consumption rose as a result, and consumer demand for beef is strong in South Korea. The region's coarse grain and soybean meal consumption is therefore expected to rise, boosting U.S. sales.

The region's cotton spinners are operating near capacity; they have back orders that will keep them busy for most of the year. Total cotton consumption rose strongly this year, and a rebounding U.S. market share boosted U.S. exports to the region 322 percent during the first 9 months of fiscal 1987. *[Stephen MacDonald (202) 786-1621]*



Transportation & Storage

GRAIN STORAGE OUTLOOK

Adequate storage space should be available for the 1987 grain harvest. Ending stocks for 1986/87 are estimated to be 13 percent above last year, but a smaller harvest and increased use will likely reduce total storage needs below last year's. Then, approximately 5 billion bushels of storage capacity remained unused. Even with no growth in capacity since December 1986, 5 to 6 billion bushels of storage space are likely to remain unused this year.

However, capacity growth during 1987 is believed to be nearly equal that of 1986. In 1986, on-farm capacity increased an estimated 963 million bushels and off-farm capacity rose 839 million bushels.

As usual, some States are likely to encounter temporary storage problems as harvest peaks. Facilities in Kansas and Nebraska may be strained, but normal grain use will relieve the problem by yearend. Although aggregate storage is adequate, available capacity is not uniformly distributed within a State. Thus, individual producers may encounter local shortages. Additionally, those facilities best located to serve existing markets are most likely to greet harvest with nearly empty bins because of brisk sales. Less-advantaged facilities are likely to have sold less grain, and will still have relatively large stocks on hand when harvest commences.

Grain Storage Capacity, January 1986-December 1986

Region	Grain storage capacity January 1, 1986 *			Grain storage capacity December 1, 1986 *			Change in capacity (Jan.-Dec.86)		
	On-farm	Off-farm	Total	On-farm	Off-farm	Total	On-farm	Off-farm	Total
	Million bushels								
Eastern Corn Belt	6,980	3,315	10,295	6,820	3,817	10,637	-160	502	342
Western Corn Belt	3,583	2,137	5,720	3,700	2,353	6,053	117	216	333
Southeast	798	763	1,561	954	800	1,754	156	37	193
Southwest	394	1,091	1,485	360	1,130	1,490	-34	39	5
West	1,112	768	1,880	1,310	815	2,125	198	47	245
East	0	214	214	686	212	898	686	-2	684
Total	12,867	8,288	21,155	13,830	9,127	22,957	963	839	1,802

Source: National Agricultural Statistical Service
* Does not include rice storage facilities.

On-Farm Storage Still Makes the Difference

In December 1986, on-farm capacity accounted for 60 percent of the nearly 23 billion bushels of grain storage capacity estimated to exist in the United States. Nearly half of all on-farm capacity is located in the eastern Corn Belt, and 46 percent of total capacity. The eastern and western Corn Belt regions together account for 73 percent of U.S. grain storage capacity. Data show that on-farm storage in the eastern Corn Belt decreased by an estimated 160 million bushels during 1986. However, this estimate is within the range of the sampling error and may not reflect an actual decline in capacity.

Between 1979 and 1986, on-farm storage capacity grew 52 percent. Growth in the earlier years was partially attributable to the Farm Storage Facility Loan and the Farmer-Owned Reserve programs. Growth in the later years largely occurred as farmers added capacity to store loan commodities more cheaply than they could in off-farm storage.

Off-farm capacity has also grown, but less dramatically. Off-farm capacity increased 18 percent from 1979 to 1986. Furthermore, 839 million bushels were added during the first 11 months of 1986, a 10-percent increase in less than a year.

The structure of the off-farm grain storage industry changed during the 1980's. Although total capacity kept growing, the number of facilities shrank 10 percent between 1979 and 1986. Average capacity per facility rose about 12 percent during these years, to nearly 590,000 bushels, and further increased to 650,000 bushels in 1986. These fewer and larger facilities may be able to market grain more efficiently, in part through access to unit trains and contract rail rates. However, the cost of transporting grain to off-farm elevators has also increased.

Harvest Shortfall Reduces Problem

Production shortfalls in the Southeast region freed storage capacity and created a larger-than-normal demand for feed grains from other areas. This will likely ease shortages of storage space in the Corn Belt. Southeast corn production is now estimated at about 411 million bushels, 3 percent above last year but 24 percent less than in 1985. This suggests that the Southeast will import about 136 million more bushels of corn than in 1985.

During July-August, monthly rail shipments of grain averaged 22,500 cars higher than in the second quarter. About 44 percent of this increase was due to shipments to export points. Thus, more than 12,500 cars of grain per month—about 44 million bushels—have been relocated from tight-storage areas to areas where storage is likely to be abundant. This relocation is expected to continue through the year.

Railcars Under Stress

Railroads have shown the ability to load as many as 32,900 cars per week. This record was set in 1980 when the covered hopper car fleet (each car holds about 3,500 bushels) stood at 185,900 units. In June 1987, weekly car loadings averaged 32,700. Although the covered hopper car fleet now contains 234,000 cars, rail car shortages were reported during the June-July wheat harvests.

Last year the covered hopper car fleet entered the harvest season with about one-third of its capacity unused. This year the situation is much tighter. Commencing in June, average grain car loadings have ranged from 30,300 to 32,700 per week, a near-record. Spot car shortages usually occur during fall harvest. This year they are expected to be more numerous and of slightly longer duration. While early relocation of grain stocks eases the storage situation, it also results in many rail cars being out of position when harvest starts.

Barges Continue In Good Supply

Barge shipments during 1987 were substantially larger than in 1986. Through July 1987 grain shipments on the Illinois and upper Mississippi rivers totaled 26.7 million tons, 40 percent greater than in 1986. Data on the size of the barge fleet are not available, but there is no reason to believe that the fleet has declined this year.

Barge rates this year were generally above first-half 1986, reflecting the substantial upturn in demand. Overall, it appears that the supply of barges will remain adequate, but rates can be expected to rise sharply as harvest peaks. *[T. Q. Hutchinson (202) 786-1840]*

Resources

INPUT INDUSTRIES' REVENUE DECLINES

Government programs helped net cash income of farmers reach a record $52 billion in 1986. Yet farmers who participate in these programs are required to reduce planted acreage, which in turn reduces the demand for agricultural inputs.

While past programs often increased commodity support prices and encouraged additional input use, the current programs lower support prices to foster U.S. competitiveness in international markets. Input industries, which once enjoyed higher demand for their output from farm programs, have had to adjust to a new environment.

Input manufacturers' profit margins are being squeezed by lower sales and by pressures to lower prices or minimize price increases. Farm cash expenses in 1986 for manufactured inputs (pesticides, fertilizers, electricity, and fuels and oils) were 29 percent below 1981. Farmers' expenditures for seed were down 12 percent from 1981. Real expenditures for farm machinery in 1986 were only 27 percent of the 1979 peak.

Lower Supports, Acreage Reduce Input Use

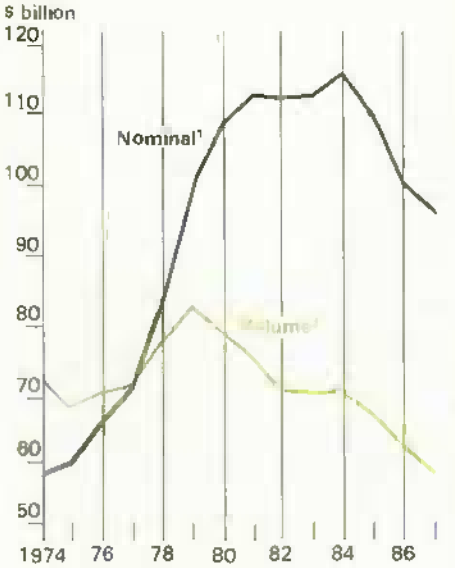
Planted acres peaked in 1981 and have fallen gradually since. The dramatic fall due to the PIK program in 1983 and the rebound the following year were exceptions. By 1986, planted acres were 12 percent below 1981.

Commodity input use tends to decrease with lower crop prices or higher input prices. After increasing from 1982 to 1985, support levels fell sharply in 1986, and they are still falling slightly in 1987. Higher support levels between 1982 and 1985 likely tempered falling input use stemming from lower crop prices. Corn, wheat, cotton, and soybean prices have fallen 40, 37, 12, and 22 percent, respectively, since 1981.

Gross farm cash expenses fell as farmers cut production. Last year, reductions in planted acres helped shrink cash expenses for seed, fertilizer, fuels and oils, and pesticides by $4.2 billion. Lower crop prices helped reduce feed expenses by another $1.8 billion. Partly because of the decline in cash expenses, farm net cash income reached $52 billion in 1986, 9 percent higher than in 1985. However, lower cash expenses imply a shrinking domestic market for U.S. input industries.

For most farm input industries, plant capacity, capital expenditures, and employment have been reduced (or the rate of increase slowed) since the 1970's. However, in some instances the industry was stabilized by increased exports of agricultural inputs.

Volume of Inputs Purchased Has Been Falling in 1980's



[1]Gross cash expenses by farmers.
[2]Expenses deflated by the index of prices paid by farmers; 1977=100.

Fertilizer Spending Down 38 Percent

Domestic consumption of nitrogenous, phosphatic, and potassic fertilizers fell by 12, 23, and 20 percent, respectively, between 1981 and 1986. Over the same period, fertilizer prices paid by farmers dropped 14 percent. Consequently, farmers' expenditures for fertilizer and lime declined by over 38 percent in nominal terms—nearly 29 percent in real terms.

Because the U.S. phosphate industry is one of the world's lowest cost producers of phosphate fertilizers, it has been able to offset the fall in domestic demand by increasing its share of the U.S. phosphate fertilizer market and by increasing export sales. Thus, U.S. phosphate exports have increased while imports have declined.

However, domestic nitrogen and potash producers have not only had to face the fall in domestic demand, but also have seen their competitive position decline since the early 1980's. The United States has been a net importer of nitrogen since 1983, with imports increasing 69 percent from 1981 to 1986.

The resulting decline in revenues has sent the U.S. fertilizer industry into major restructuring and consolidation. Capital expenditures fell 65 percent from 1981 to 1985. Plant operating rates have dropped and company mergers, plant closings, and bankruptcy filings have increased, particularly since 1984. Employment in the industry fell by 22 percent, or 8,400, from 1981 to 1985.

With 70 million acres idled in 1987, domestic plant nutrient use is projected to decline for the third consecutive year, to approximately 18.5 million tons. This is only 2-3 percent above 1983, when a record 78 million acres were diverted under PIK.

Overall, farm fertilizer prices in April 1987 averaged more than 6 percent below last year. However, trade during fertilizer year 1987 improved over 1986, as world demand increased and the value of the dollar declined. U.S. plant nutrient exports have increased by 33 percent, while imports have declined by 9 percent.

Seed Consumption & Trade

	Unit	1981	1985	1986	1987 *	Change 1981-1986	Change 1985-1986	Change 1986-1987
						- - - - - Percent - - - - -		
Total seed use 1/								
Corn	Mil. bu.	20.2	21.20	19.50	15.6	-2.3	-3.5	-20.0
Wheat	Mil. bu.	110.0	93.0	84.0	80.0	-23.6	-9.7	-4.8
Grain sorghum	Mil. bu.	2.07	1.97	1.60	1.41	-22.7	-18.8	-11.9
Soybeans	Mil. bu	64.4	60.6	59.0	58.1	-8.4	-2.6	-1.5
Cotton	Mil. lbs.	343.2	278.2	262.6	273.0	-23.5	-5.6	4.0
Farmers' expenditures for seed								
Nominal	$ bil.	3.4	3.4	3.0	NA	-11.8	-11.8	NA
Real (1977 dollars) 2/	$ bil.	2.5	2.2	2.0	NA	-16.5	-7.4	NA
U.S. seed trade 3/								
U.S. imports	$ mil.	61	79	104	NA	70.5	31.6	NA
U.S. exports	$ mil.	282	343	357	NA	26.6	4.1	NA
Trade balance	$ mil.	221	264	253	NA	14.5	-4.2	NA

*Based on June 1 planted acreage 1/ National average seeding rate multiplied by planted acreage. 2/ Deflated by the prices paid index for seed. 3/ Fiscal year. .NA=Not available.

Gross Cash Income and Cash Expenditures

	1985	1986	Change 1985-1986	
	$ bil.		Percent	
Gross cash income	156.9	152.0	-4.9	-3.1
Crop receipts	74.4	63.6	-10.8	-14.5
Livestock	69.8	71.6	1.8	3.0
Farm-related income 1/	5.0	5.1	0.1	2.0
Direct Government payments	7.7	11.8	4.1	53.2
Gross cash expenses	109.6	100.1	-9.5	-8.7
Feed	18.0	16.2	-1.8	-10.0
Livestock	9.0	9.6	0.6	6.7
Seed	3.4	3.0	-0.4	-11.8
Fertilizer	7.3	5.8	-1.5	-20.5
Fuels & oils	6.6	4.8	-1.8	-27.3
Electricity	2.2	2.1	-0.1	-4.5
Pesticides	4.8	4.3	-0.5	-10 4
Total interest charges	17.9	16.2	-1.7	-9.5
Other expenses 2/	40 4	38.1	-2.3	-5.7
Net cash income	47.3	52.0	4.7	9.1

1/ Income from custom work, machine hire, farm recreational activities, sales of forest products, and miscellaneous sources. 2/ Includes repairs, machine hire and custom work, animal health, dairy deductions, marketing, storage, transportation, taxes, hired labor, and net rent.

Selected Indexes of Prices Paid by Farmers*

Index	1981	1986	1987	Change 1981-1986	Change 1986-1987
	1977 = 100			----Percent----	
Seed	144	146	149	1.4	2.1
Fertilizer	145	125	117	-13.8	-6.4
Agricultural chemicals	109	126	123	15.6	-2.4
Fuels & energy	217	157	164	-27.6	4.5
Tractors & self-propelled machinery	146	175	174	19.9	-0.6
Other machinery	143	184	186	28.7	1.1
Building & fencing	133	135	136	1.5	0.7

*April prices.

For Pesticides, Exports Are Bright Spot

The U.S. market for pesticides has also contracted since 1981, but the decline appears less dramatic than for fertilizer. Of the major insecticide-using crops, corn and soybean acres declined 9 percent each and cotton acres 29 percent between 1981 and 1986.

The index of pesticide prices paid by farmers rose by nearly 16 percent from 1981 to 1986, although some pesticide prices have declined. Farmers' total expenditures for pesticides have risen since 1981 because of price increases, not increased use.

The international market has been a brighter spot for the U.S. pesticide industry. While U.S. pesticide imports increased by $85 million from 1981 to 1986, pesticide exports increased by $220 million. The U.S. trade balance for pesticides totaled $1 billion in 1986, an increase of more than 15 percent from a year earlier.

By 1985, the latest year for which data are available, the value of product shipped by the U.S. pesticide industry was off by almost 2 percent. Physical quantities produced were off 10 percent for herbicides, 18 percent for insecticides, and nearly 24 percent for fungicides. Employment fell almost 13 percent by 1985, and capital expenditures have also declined.

Agricultural Pesticide Expenditures, Production, & Trade

	Unit	1981	1985	1986	Change 1981-1986	Change 1985-1986
					----Percent----	
Farmers' expenditures for Pesticides						
Nominal	$ bil.	4.2	5.0	4.3	2.4	-14.0
Real 1/	$ bil.	3.78	3.91	3.41	-9.7	-12.7
Pesticide trade						
U.S. exports	$ mil.	1204	1363	1424	18.3	4.5
U.S. imports	$ mil.	338	449	423	25.1	-5.8
Trade balance	$ mil.	868	911	1001	15.3	9.9
Production 2/						
Product shipped	$ bil.	5.2	5.1	NA	-1.9*	NA
Employment	Thous.	17.2	15.0	NA	-12.8*	NA
Capital expenditure	$ mil.	252.8	194.8	NA	-22.9*	NA
Quantity produced 3/						
Insecticides	Mil.lbs	448.3	370.0	NA	-17.5*	NA
Herbicides	Mil. lbs	839.1	755.8	NA	-9.9*	NA
Fungicides	Mil. lbs	142.7	109.0	NA	-23.6*	NA

*Percent change from 1981-1985 1/ Deflated by the price paid index for agricultural chemicals. 2/ SIC code 2879: U.S. Department of Commerce, Bureau of the Census. Annual Survey of Manufacturers. 1985 and previous years. 3/ U.S. International Trade Commission. Synthetic Organic Chemicals: United States Production and Sales. 1985 and previous years. NA=Not available.

Input Use Indicators by Commodity

Crop	Unit	----Use---- 1981	1985	1986	1987 *	----Percent Change---- 1981-1986	1985-1986	1986-1987
Corn								
Acres planted	Mil. acres	84.1	83.4	76.7	66.0	-8.8	-8.0	-14.0
Average price 1/	$/bu.	2.47	2.23	1.51	NA	-38.9	-32.3	NA
Yield	Bu./acre	108.9	118.0	119.3	119.9	9.6	1.1	0.5
Wheat								
Acres planted	Mil. acres	88.9	75.6	72.0	65.2	-19.0	-4.7	-9.5
Average price 1/	$/bu.	3.69	3.08	2.42	NA	-34.4	-21.4	NA
Yield	Bu./acre	34.5	37.5	34.3	38.2	-0.6	-8.5	12.2
Cotton (upland)								
Acres planted	Mil. acres	14.3	10.7	10.1	10.4	-29.4	-5.6	3.0
Average price 1/	Cents/lb.	54.0	56.1	51.5	NA	-4.6	-8.2	NA
Yield	Lb./acre	543	630	552	616	1.7	-12.4	11.6
Soybeans								
Acres planted	Mil. acres	67.5	63.1	61.5	58.7	-8.9	-2.5	-4.6
Average price 1/	$/bu.	6.07	5.05	4.80	NA	-20.9	-5.0	NA
Yield	Bu./acre	30.1	34.1	33.8	34.0	12.3	-0.9	0.6
Crop acres planted 2/	Mil. acres	292.5	272.3	257.3	245.5	-12.0	-5.5	-4.6

*September 1987 estimates. 1/ Marketing year. 2/ Consists of corn, oats, barley, sorghum, wheat, soybeans, cotton, tobacco, rice, and peanuts. NA=Not available.

Domestic sales of pesticides are expected to decline again in 1987 because of heavy farmer participation in commodity programs. While some pesticide prices have increased, the index of pesticide prices paid by farmers in the spring of 1987 averaged 2 percent lower than last year.

Seed purchases for major crops have fallen steadily since the 1981 peak in planted acres. The decline has continued into 1987, except for cotton, which is estimated to be up 4 percent. The decline in field seed demand has been somewhat offset by increased demand for grass and forage seeds. Enrollment in the Conservation Reserve Program (CRP) requires the establishment of a permanent vegetative cover to conserve highly erodible land. However, CRP acres are not reseeded every year, so the increased demand will be temporary.

The international market has also been a bright spot for the domestic seed industry. Net seed exports increased by almost 15 percent from 1981 to 1986, reaching $253 million.

Prices of hybrid corn and grain sorghum seed increased by 18 and 36 percent, respectively, between 1981 and 1986, but they have declined this year. After falling 21 percent by 1986, soybean seed prices rose in 1987. Cottonseed prices continued to increase. Overall, the average farm price paid for seeds has been relatively

Farm Machinery Sales, Production, & Trade

	Unit	1981	1985	1986	Change 1981-1986	Change 1985-1986
					Percent	
Unit sales 1/						
40-99 hp. two-wheel-drive tractors	Thous.	51.0	37.8	30.8	-39.6	-18.5
100+ hp. two-wheel-drive tractors	Thous.	43.2	17.7	14.3	-66.9	-19.2
Four-wheel-drive tractors	Thous.	9.7	2.9	2.1	-78.4	-27.6
Farmers' expenditures for						
Tractors						
Nominal	$ bil.	3.7	1.9	1.5	-59.5	-21.1
Real 2/	$ bil.	2.43	1.09	0.86	-64.5	-20.8
Other farm machinery						
Nominal	$ bil.	6.5	3.7	3.2	-50.8	-13.5
Real 2/	$ bil.	4.45	2.00	1.73	-61.0	-13.3
Farm machinery trade						
Imports	$ bil.	1.55	1.56	1.63	5.2	4.5
Exports	$ bil.	2.94	1.86	1.47	-50.0	-21.0
Trade balance	$ bil.	1.39	0.30	-0.16	N/A	N/A
Production 3/						
Product shipped	$ bil.	13.0	7.5	NA	-42.3*	NA
Capital expenditures	$ mil.	522.5	163.5	NA	-68.7*	NA
Employment	Thous.	125.0	67.1	NA	-46.3*	NA

*Percent change from 1981-1985. 1/ From the Farm and Industrial Equipment Institute (FIEI). 2/ Deflated by prices paid index for tractors and other farm machinery. 3/ SIC Code 3523. U.S Department of Commerce. Bureau of the Census. Annual Survey of Manufacturers. 1985 and previous years. NA=Not available.

Fertilizer Consumption, Production, and Trade

	Unit	1981	1985	1986	Change 1981-1986	Change 1985-1986
					----Percent----	
Consumption 1/						
Nitrogen	Mil. nut. tons	11.92	11.49	10.44	-12.4	-9.1
Phosphate	Mil. nut. tons	5.43	4.66	4.16	-23.4	-10.7
Potash	Mil. nut. tons	6.32	5.55	5.03	-20.4	-9.4
Farmers' expenditures for fertilizer and lime						
Nominal	$ bil.	9.4	7.3	5.8	-38.3	-20.5
Real 2/	$ bil.	6.5	5.4	4.6	-28.6	-14.1
Trade 1/						
Nitrogen imports	Mil. nut. tons	2.45	3.73	4.15	69.4	11.3
Nitrogen exports	Mil. nut. tons	3.09	3.20	2.05	-33.7	-35.9
Phosphate imports 3/	Mil. nut. tons	0.25	0.14	0.11	-56.0	-21.4
Phosphate exports 3/	Mil. nut. tons	4.41	5.53	4/ 3.16	25.4*	4/ NA
Potash imports	Mil. nut. tons	5.49	5.48	4.87	-11.3	-11.1
Potash exports	Mil. nut. tons	0.88	0.59	0.49	-44.3	-16.9
Production 5/						
Product shipped	$ bil.	9.9	9.4	NA	-5.1*	NA
Capital expenditures	$ mil.	888.6	313.2	NA	-64.8*	NA
Employment	Thous.	38.3	29.9	NA	-21.9*	NA

* = percent change from 1981-1985. 1/ Fertilizer year. 2/ Deflated by prices paid index for fertilizer. 3/ Does not include phosphate rock. 4/ Does not include superphosphoric acid because of a data reporting change by the Department of Commerce in July 1985. Thus, phosphate exports are understated compared to earlier years. 5/ SIC codes 2873, 2874, and 2875. U.S. Department of Commerce, Bureau of the Census. Annual Survey of Manufacturers. 1985 and previous years. NA=Not available.

stable throughout 1981-86, rising by less than 2 percent. Farmers' nominal expenditures for seeds remained constant from 1981 through 1985, but were off nearly 12 percent in 1986.

Farm Machinery Sales Declining

Farm machinery sales are more dependent on real interest rates and farm equity than are nondurable input sales. New and used farm machinery sales have declined significantly since 1981, in part because historically high real interest rates have raised the cost of farm machinery investments and falling farm equity has constrained borrowing.

However, fewer acres in production and lower commodity prices have decreased the return to farm machinery, also reducing farm machinery demand. Though higher net cash incomes have improved the financial situation of many farmers, producers are expected to continue using the money to retire debt; the farm machinery industry is not expected to see any significant improvement in 1987 sales.

High real interest rates, falling equity, and declining planted acreage have led to a 40-percent drop in unit sales of medium-sized 2-wheel-drive tractors. Sales of large 2-wheel-drive tractors have dropped 67 percent and 4-wheel-drive tractors nearly 80 percent since 1981.

Since 1981, farmers' expenditures for new and used tractors and other farm machinery have fallen over 50 percent. At the same time, export sales of machinery have declined and imports (many from U.S. plants located abroad) have increased.

As a result, the total nominal value of machinery shipped is down over 40 percent, employment has been cut nearly in half, and capital expenditures are off close to 70 percent from 1981 levels. ERS forecasts for sales of new farm machinery in 1987 show a continuation of the decade's downward trend, with unit sales of over-100-horsepower tractors and combines off 30-40 percent from 1986. *[LeRoy Hansen, Harry Vroomen, and Stan Daberkow (202) 786-1456]*

Farm Finance

1986 TAX REFORM AFFECTS LIVESTOCK SECTOR

The Tax Reform Act of 1986 (TRA) will have significant effects on the agricultural sector:

- lower marginal rates will act to reduce taxes;
- however, loss of capital gains exclusions will raise taxes for many producers with breeding livestock, more than offsetting the benefits of lower rates;
- changes in the treatment of losses and development costs could reduce outside investment in livestock operations;
- substantially higher annual after-tax costs of depreciable assets can result from the loss of investment tax credits; this loss likely will affect livestock farmers now more than crop farmers.

Changes in after-tax profits influence farm management decisions. Tax law is only one factor affecting profits, and usually not a dominating one. For instance, the livestock cycle is more responsive to competition with poultry and hogs than to changes in tax laws. Even so, the act will make some differences.

This article looks at impacts the tax changes might have on cattle and hog producers, assuming that other economic considerations are held aside.

The TRA would tend in the short run to reduce the incentive to expand. In the longer run, the tendency for producers to expand more slowly in response to other market signals could lengthen the expansion phases of the cattle and hog cycles, reduce price volatility, and slow the increase in the supply of livestock products.

Provision Changes, Timing of Tax Reform Important

There are two primary reasons why the TRA has become an important factor in the current livestock profit picture:

(1) Four key tax law changes greatly reduce incentives to invest in livestock enterprises: the elimination of capital gains deductions, repeal of the tax credit for investment, the requirement that a taxpayer be actively involved in farming to use farm losses to offset nonfarm income, and the requirement that preproduction expenses be capitalized. If the development period is 2 years or more, costs of raising livestock cannot be deducted as annual expenses during the development period.

These changes make livestock herds and facilities less attractive than they were solely as tax shelters. The changes not only will reduce the investment activity of nonfarm investors, but also could cause farmers and ranchers to substantially slow their pace of livestock investment relative to what they would have done under the old law.

(2) The TRA followed on the heels of 1985 farm legislation that caused U.S. commodity prices to align with world supply and demand. Lower grain prices reduced the feed bill for poultry, beef, dairy, and hog producers at a time when cattle and hog expansion incentives were cyclically low. The law has taken effect in what now appears to be the final stages of the mid-1980's farm financial crisis. The financial problems of recent years have resulted in producers' taking a cautious approach to investment.

Some market signals, such as lower feed prices, are incentives for expansion. Others, such as the loss of tax incentives and the financial conservatism of both farmers and agricultural lenders in the wake of financial crisis, encourage slower supply response. Partly because of these changes, the

growth phase of the current hog and cattle cycles may show less expansion than normal or may continue longer than usual.

Distribution of Tax Burden Shifting to Livestock Sector

Preliminary evidence from a tax accounting model was applied to the 1986 USDA Farm Costs and Returns Survey. Results suggest that enterprises with breeding stock will pay higher taxes than without the 1986 tax reforms. Although the TRA is being phased in during 1986-88, if all tax code revisions had been effective for 1986 returns and if farm operators did not otherwise alter their business decisions, then dairy, beef cow-calf, and hog farrow-finish operations would generally have had higher tax liabilities.

Tax increases for these three types of enterprises would have been from 1 to 15 percent. However, while livestock operators would have faced higher tax bills, the average State and Federal income tax bill would have fallen 11 to 26 percent for small grain, corn/soybean, and cotton/rice producers. These enterprises benefit from the lower tax rates and are less affected by the investment provisions.

Loss of investment tax credits and capital gains exclusions and the capitalization of preproduction expenses do not have as much effect on operations that do not raise hogs and cattle. Like crop producers, operators who only finish livestock benefit from reduced tax rates. New restrictions on outside investors' use of farm losses to reduce nonfarm income for tax reasons will substantially lower the incentive for some nonfarm investors to invest in finishing operations.

Thus, operations that feed livestock may benefit from both lower tax burdens and the investment-dampening effects of the TRA. If investment in livestock finishing shifts increasingly from nonfarmer to farmer investors, then agricultural lenders will increasingly be called upon to help finance farm and ranch operations that retain ownership of stock until it is ready for market.

After-Tax Costs Increasing For Machinery and Buildings

The livestock-supply-constraining effects of the TRA were analyzed by evaluating the effects of tax reform on the costs of agricultural assets. Factors underlying the analysis included effective tax rates, farm debt levels, the difference between tax and economic depreciation, investment tax credit, interest rates, and capital gains deductions. Costs of farmland and depreciable assets were estimated under pre- and post-TRA tax rules.

The average, after-tax cost of all farmland will decline 8 percent because of tax reform, putting annual cost at about 10 percent of the total market value of land. Although annual land costs tend to be higher for livestock than for crop farms, the tax legislation of 1986 will result in lower land costs for all farm types.

With the TRA, after-tax costs for machinery and building assets each year rise to about 19 percent of the assets' total market value, notably higher than the 17 percent before tax reform. Cow-calf, farrow-finish, dairy, and feeder cattle operations are anticipated to have higher annual machinery and building costs than cotton/rice and corn/soybean farms.

The livestock sector uses more depreciable assets than the crop sector, which results in a larger percentage increase in taxes from the loss of the capital gains exclusion. These after-tax input cost increases, which result directly from the loss of investment credits and from altered depreciation schedules, indicate that future livestock expansion could be slowed by lower investment levels.

The full impact of the TRA on the livestock sector is uncertain. The loss of tax benefits is likely to narrow expansion fluctuations or to lengthen the expansion phase. It is also possible that the difference between the high and low prices of the cycle will be less.

The reasoning is: (a) the expansion rate is slowed by the removal of investment credit and capital gains exclusions, (b) fewer nonfarm investors will be entering and leaving the livestock investment market, (c) an increasing proportion of farm expansion investment is likely to be self-financed rather than debt-financed, and (d) a slow-growth, more self-financed cycle will dampen price changes arising from shifts of supply. Sorting out livestock cycle issues is also complicated by industry consolidation, continuing

About the Analysis

A tax accounting model was applied to data collected from 12,000 producers in early 1987. Enumerators with the State Agricultural Statistics Services collected data on costs, receipts, off-farm income, and investment expense in personal interviews. The accounting model included the Federal income self-employment, and employee taxes State income taxes were also included and assumed to be 5 percent of adjusted gross income minus Federal income tax.

Two tax accounting versions were developed. The first included rates and provisions under the Economic Recovery Tax Act of 1981 and the Tax Equity and Fiscal Responsibility Act of 1983. Federal tax rates on earned income ranged to 50 percent and key provisions included capital gains deductions, investment tax credit, and accelerated cost recovery (depreciation).

The second accounting version was based on the lower marginal rates under the Tax Reform Act of 1986. Capital gains deductions and investment tax credit were not included in this version.

A key assumption of the analysis is that farmers would not have substantially changed their short-run cost structure and investment patterns had the TRA been fully in effect in 1986 (the data year). This assumption is less critical during a year such as 1986 characterized by very low investment.

Income from both farm and off-farm sources was included to compute taxable income. The results may understate the importance of the 1986 Tax Reform Act to agriculture because information about the capitalization of preproduction expense and passive losses of landlords was not in the survey data.

Since many of the farmers classified as livestock producers also had crop enterprises, the tax reform effects for pure livestock operations may also be understated. Finally, the tax effects analyzed here could be overwhelmed in the future by changes in global supply and demand conditions, which were assumed constant for the purposes of the analysis.

How the 1986 Tax Reform Act Changed Annual After-Tax Costs of Inputs 1/

Enterprise	Land costs Pre-TRA	Land costs Post-TRA	Land costs Change	Machinery and building costs Pre-TRA	Machinery and building costs Post-TRA	Machinery and building costs Change
			Percent			
All farms	10.6	9.8	-8	16.7	19.2	15
Beef, cow-calf	10.8	09.8	-9	17.1	19.5	14
Beef, feeding	11.9	10.8	-9	17.0	20.0	18
Dairy	11.0	10.7	-3	17.0	19.8	16
Hog, farrow-finish	10.4	10.2	-2	17.0	19.5	15
Hog, finish	10.8	9.8	-9	17.1	19.2	12
Corn/soybean	11.4	10.0	-12	17.1	19.2	12
Cotton/rice	8.4	8.4	0	13.0	17.1	32
Small grain	10.8	10.3	-5	17.0	19.6	15

1/ Annual costs are expressed as percentages of the market values of land and depreciable assets. Land costs include the effects of interest, land appreciation, and income taxes. Machinery and building costs include depreciation, interest, and taxes. Change is expressed as the percentage change in the pre- and post-TRA percentages.

Impact of the 1986 Tax Reform Act on Estimated Tax Liabilities of Farm Operators 1/

Major enterprise	Value of farm's 1986 production: $40,000-$249,999 Pre-TRA	$40,000-$249,999 Full-TRA	$40,000-$249,999 Change	More than $250,000 Pre-TRA	More than $250,000 Full-TRA	More than $250,000 Change
	$/farm		Percent	$/farm		Percent
All farm types	11,885	10,325	-13.1	61,172	50,201	-17.9
Beef, cow-calf	13,208	12,746	-3.5	58,883	63,021	7.0
Beef, feeding	12,885	9,869	-30.6	34,314	27,029	-21.2
Dairy	6,083	6,294	3 5	35,423	36,832	4.0
Hog, farrow-finish	6,927	7,962	14.9	41,618	42,028	1.0
Hog, finish	8,410	7,761	-7.7	74,461	55,197	-25.9
Corn-soybean	13,056	10,749	-17.7	37,493	30,646	-18.3
Cotton-rice	20,528	16,115	-21.5	84,342	62,146	-26.3
Small grain 2/	13,576	11,462	-15.6	35,207	30,008	-14.8

1/ Tax liabilities include Federal income tax, State income tax, and employment taxes levied on combined farm and off-farm incomes reported on a 1986 operator survey. 2/ Major enterprises of small grain farms were wheat, oats, and barley.

gains in production technology, and the competitive effects of poultry expansion in recent years.

An open question is what will happen if production increases and prices fall. Will producers quickly reduce production when the loss phase of the cycle is underway? With recovered balance sheets and without intense pressure from lenders to cut back, livestock producers might be slower to rein in expansion if the market signals a cutback.

The recent financial crisis reinforces a go-slow approach to expansion, even as current low feed prices are keeping livestock producers' profits high. Higher taxes may not be welcome news for dairy, beef, hog, and sheep producers. But, these producers are experiencing an extended phase of solid after-tax profits based on lower costs and slower supply response. At the margin, some of the credit for a better long-term profit picture indirectly belongs to the 1986 tax reform. *[Diane Bertelsen and Gregory Hanson (202) 786-1807]*

BANK FAILURES STILL RISING

The Federal Deposit Insurance Corporation (FDIC) handled 96 commercial bank failures during the first 6 months of 1987, and helped four other troubled banks to prevent closure. These 100 failures are well over the 65 failures in the first half of 1986. At the current rate, about 200 banks will fail this year, far over last year's 144, which was a post-Depression record.

The five States with the majority of energy banks—Texas, Oklahoma, Louisiana, Colorado, and Kansas—are still bearing the brunt of failures. Banks in these States accounted for 63 of the 1987 failures through June 30, reflecting the still-fragile condition of the energy sector and related real estate markets. In Texas, 31 commercial banks failed this year.

Those five States have had 44 percent of the rural bank failures and 38 percent of the agricultural bank failures thus far in 1987 (agricultural banks are those with more than 15.78 percent of their loans to agricultural borrowers).

The imminent bailout of First City Bankcorp of Texas, a major multibank holding company, likely will cost the FDIC $1 billion. While not an agricultural bank, First City Bankcorp holds agricultural loans greater than the total assets of any agricultural bank that failed this year—about 1 percent of its $10 billion loan portfolio. The bailout could cause FDIC's deposit insurance fund, currently around $18 billion, to decline in 1987 for the first time in history.

Rural Bank Failures High

Failures of farm banks are not dropping off, as was previously believed, although the proportion is down slightly from mid-1986. Failures of banks in rural areas number the highest of any half-year in the 1980's. The proportion of rural bank failures to total failures is still below its 1985 peak, however.

Although most failed rural and agricultural banks are relatively small and reopen under new management, bank failures hurt local credit availability. Historically, banks, including acquiring banks, have not freely bought troubled loans held by failing banks; the FDIC usually is left to administer them.

Failed Commercial Banks

	Total 1/	Agricultural 2/	Rural 3/
1981	7	1	3
1982	33	10	19
1983	44	7	15
1984			
Qtr.1	13	3	6
Qtr.2	30	6	11
Qtr.3	17	10	9
Qtr.4	18	12	15
1984 total	78	31	41
1985			
Qtr.1	20	13	14
Qtr.2	32	21	20
Qtr.3	33	17	23
Qtr.4	33	18	24
1985 total	118	69	81
1986			
Qtr.1	26	14	17
Qtr.2	39	14	21
Qtr.3	42	23	25
Qtr.4	37	15	20
1986 total	144	66	83
1987			
Qtr.1	54	22	32
Qtr.2	46	20	22
1987 first half	100	42	54

1/ Totals exclude mutual savings banks, savings and loan associations, commercial banks not insured by the FDIC, and banks headquartered in U.S. possessions and territories. Failures for 1987 are as of June 30 and include open bank assistance cases. 2/ Agricultural banks are those for which the ratio of farm (both production and real estate) loans to total loans exceeds the average of such ratios at all banks in December of the year preceding failure. 3/ A bank is classified as rural if its headquarters was located in a nonmetropolitan county.

The FDIC tends to be strict with problem debtors, since its legal responsibilities are to the failed bank's depositors, bondholders, and stockholders. Agricultural loans totaling over $207 million were held by banks that failed during the first half of 1987.

The tendency for the FDIC to acquire the troubled loans of failing institutions may be changing. Recent innovations in dealing with failing banks, and increased flexibility given bank regulators by the new banking law, allow some troubled banks to remain open. In addition, the FDIC can now take over a failed bank, keep it in business, and take the necessary time required to find a buyer.

FDIC Will Pay Other Banks To Assume Problem Loans

The FDIC has been offering to provide funds up front to induce acquiring banks to take over the failed institution's entire portfolio, rather than having FDIC assume the bulk of the problem loans. This arrangement can increase the number of bidders for failing banks, minimize the impact of failures on local communities, and also lighten FDIC's liquidation workload.

Agricultural lenders may benefit from the recent banking bill. Commercial banks with less than $100 million in assets and more than 25 percent of their loans to agriculture are allowed to spread their farm loan losses over 7 years, if they are headquartered in farm-dependent areas.

Usually, banks must take losses the year they are incurred. Thus, the loss-deferral provision may allow banks that have no capital left by normal accounting standards to remain in business and maintain service to the community. Troubled agricultural borrowers may benefit from this provision if it encourages agricultural banks to restructure weak farm loans. *[Deano Hagerman (202) 786-1882]*

General Economy

QUARTERLY UPDATE

In December, the economy will celebrate its 60th month of uninterrupted expansion, the longest peacetime expansion since 1854. Barring unforeseen developments, growth is likely to be somewhat faster in 1988 than in 1987. Part of the price of faster employment and production growth, however, will likely be higher inflation and interest rates.

Recent statistics point to solid growth. Real GNP grew at an average 3.4-percent annual rate in the first half of the year, compared with an average 1.6 percent in second-half 1986. Increasing inventories, an improving real net export deficit, and a modest recovery in business plant and equipment spending have contributed to the quickening in GNP growth. In contrast, growth in 1986 was led by consumer spending and residential building.

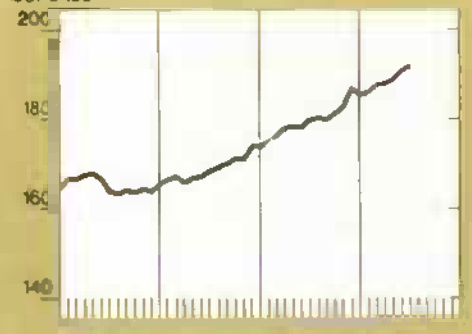
Real export growth has led the way. From the second quarter of 1986 to the second quarter of 1987, real exports rose nearly 11 percent, compared with a 1.5-percent rise from second-quarter 1985 to second-quarter 1986. Inflation-adjusted imports rose only 5 percent between the second quarters of 1986 and 1987, compared with 9.5 percent between the second quarters of 1985 and 1986.

The key factor in the inflation-adjusted trade turnaround has been

General Economic Indicators

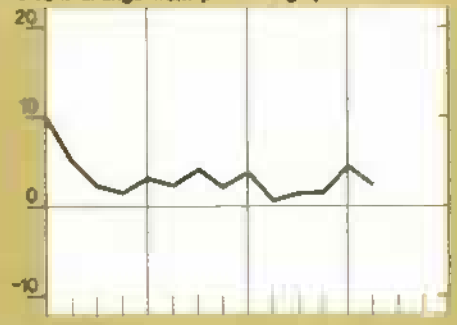
Composite leading economic indicators

1967 = 100



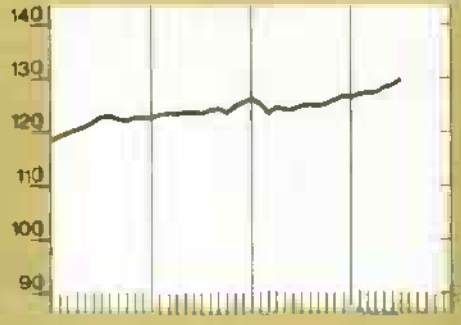
Gross national product[1]

Percent change from proceeding quarter



Industrial production

1977 = 100

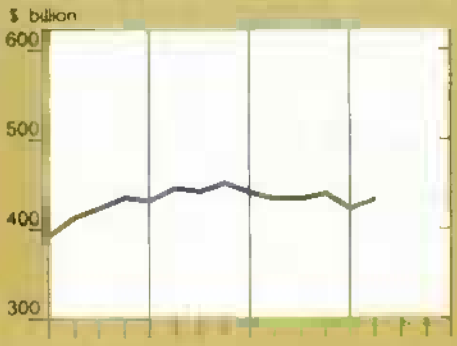


Disposable income and consumption expenditures[2]

$ billion

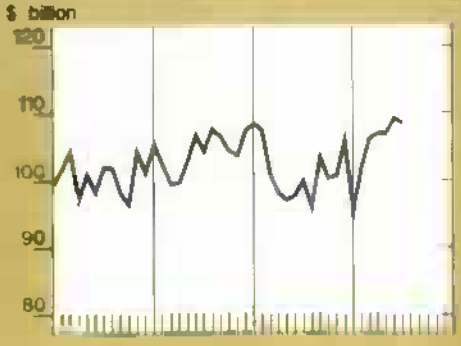
Nonresidential fixed investment[2]

$ billion



Manufacturers' durable goods orders[3]

$ billion

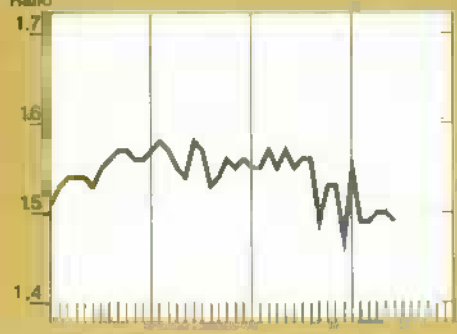


Consumer price index

Percent change from a year earlier

Inventory/sales[4]

Ratio

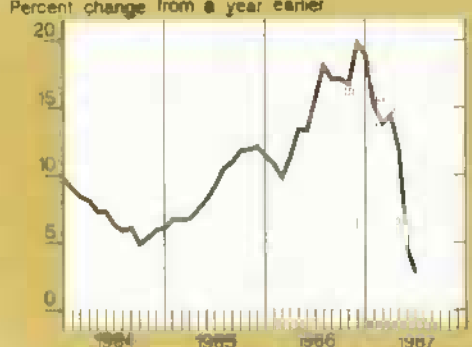


Unemployment rate[5]

Percent of all civilian workers

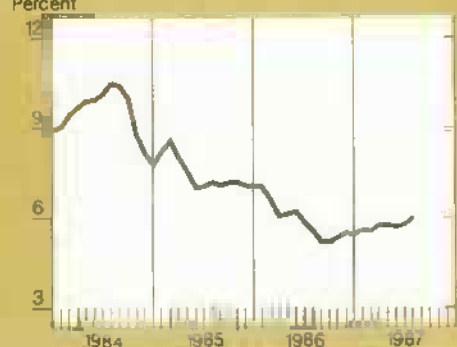
Money supply (M1)

Percent change from a year earlier



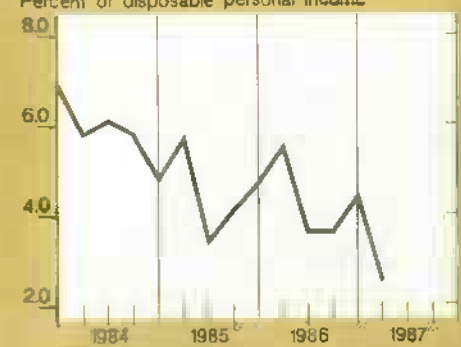
3-month Treasury bill rate

Percent



Savings rate[6]

Percent of disposable personal income



[1]Percent change from previous quarter in 1982 dollars. Seasonally adjusted annual rates. [2]Billions of 1982 dollars, seasonally adjusted at annual rates.
[3]Nominal dollars. [4]Manufacturing and trade, seasonally adjusted based on 1982 dollar. [5]Seasonally adjusted.
[6]Calculated from disposition of personal income in 1982 dollars, seasonally adjusted at annual rates.
Sources: U.S. Dept. of Commerce, U.S. Dept. of Labor, and the Board of Governors of the Federal Reserve System

the declining dollar, which has finally begun pushing up import prices and attracting foreign interest in U.S. exports.

Even though the dollar peaked in February 1985 and had fallen more than 30 percent by the end of 1986, import prices actually fell 3 percent over the same period. Since the beginning of 1987, however, the dollar has fallen another 10 percent, while import prices have shot up at an annual rate of 9.5 percent.

Rising import prices have started to choke off import demand, and make exports more price competitive. Inflation-adjusted imports and exports have been the first to improve, while nominal trade figures have become more stable, worsening only slightly. For a while, it is likely that rising import prices will continue to mask an improving trade volume picture.

Rising exports and business plant and equipment spending helped revive the manufacturing sector. Industrial production grew at a 7.8-percent annual rate in the second quarter, compared with a 1.1-percent increase for all of 1986. Gains were concentrated in nondurable manufacturing and business equipment, while auto and consumer-goods production grew more slowly. Capacity utilization rose from 79.8 percent in January to 81 percent in August. Utilization is still well below the near-88-percent level of late 1973 and the 86-percent level of late 1978, though.

Unemployment Is Low

Faster economic growth brought increases in employment, driving the unemployment rate down to levels not seen since 1979. The number of persons employed grew just over 2.3 million in the first 8 months of 1987, compared with a 2.4-million increase for all of 1986. Service jobs made up most of the increase, but manufacturing jobs increased by 130,000, a solid gain compared to the 168,000 decline in the first 8 months of 1986.

Rising employment brought rising personal income. Disposable income grew at about a 5.8-percent annual rate in the first 7 months of the year, compared with 6.4 percent in 1986. Growth in consumer installment debt slowed substantially. In the first 5 months, debt grew only 2.5 percent at an annual rate, compared with 10.5 percent for all of 1986. Part of consumer debt was rechanneled into home equity lines of credit, however.

Inflation Moderate

The inflation surge of the early spring seems to be over. The overall Consumer Price Index averaged 0.5 percent increases per month from January to April, largely because of rising energy prices. The average monthly increase from May to July was 0.3 percent, a 3.6-percent annual rate.

Consumer prices other than food and energy (a measure of the underlying inflation rate) rose at a 3.5-percent annual rate from May to July, compared with a 3.8-percent increase for all of 1986. Unit labor costs, a major price determinant, rose 1.4 percent at an annual rate in the first half, further suggesting moderate inflation.

Interest rates were volatile recently, but have been rising since October 1986. Early this year, interest rates seemed to rise with expectations of higher inflation brought on by crude oil price increases. After stabilizing in May, rates took another jump in August, probably because of heightened uncertainty about oil prices and worse-than-expected reports about the nominal trade deficit.

Some analysts believe that a too-rapid decline in the dollar will force the Federal Reserve to tighten monetary policy and push interest rates up. Because of this, interest rates were very responsive to changes in the value of the dollar. By August, interest rates were back at or slightly above spring 1986 and the Federal Reserve hiked the discount rate 0.5 percent to 6 percent. It was the first increase since 1984. Rising interest rates hurt residential building, which by second-quarter 1987 had fallen nearly 5 percent from fourth-quarter 1986.

Is the Next Recession Looming?

While most macroeconomic news seems upbeat, there is still much uncertainty about how strong economic growth really is, and there seems to be a widespread opinion that this recovery is fragile. For example, some analysts are concerned that real GNP growth has been buoyed by inventory accumulation, which sometimes signals weakness in overall product demand. Unplanned inventory accumulation foretells production cutbacks, layoffs, and falling incomes.

Other analysts point to the possibility of a sudden, sharp decline in the dollar, which would drive up inflation and interest rates, hurting spending on consumer durables, residential construction, and business investment. Finally, some analysts point out that at 60 months, the current expansion has outlived the average postwar expansion by 2 years and is due to fail.

While none of these possibilities can be ruled out, the end of an expansion is usually preceded by several signals:

- sustained increases in price and wage inflation;
- sustained increases in interest rates;
- sustained increases in the rate of capacity utilization, reaching near-historical highs; and
- an abrupt increase in the cost or availability of a key resource.

The current expansion is not showing these signals to any great extent. Consumer prices excluding food and energy rose about 25 percent in the first 54 months of the current expansion, compared with a 42-percent increase in the first 54 months of the expansion beginning in March 1975. The bank prime rate is actually about 30 percent lower after 54 months of the current expansion than it was at the November 1982 trough. After 54 months of the 1975 expansion, the bank prime was nearly double its value at the trough.

Though capacity utilization has been rising lately, it is still nearly 6 percentage points below its peak in 1975. And, after 54 months of expansion, producers' crude goods prices only recently regained their 1982 trough levels, after falling about 17 percent below trough level earlier in 1986. In contrast, crude goods prices in the 1975 expansion increased continually and were about 60 percent higher than their trough levels after 54 months of expansion. While crude oil prices nearly doubled in the last year, they are still about a third lower than in November 1982.

Rising Exports, Business Investment Will Prolong Expansion

All this suggests the expansion has room to continue, and is unlikely to die of old age in the next 18 months.

Continuing expansion will most likely be led by rising exports and business investment spending, and feature rising industrial production and manufacturing employment. Consumer spending, after a slight pause this year, should grow steadily with rising employment. Rising consumer income should also help sustain residential building in 1988.

The rest of 1987 and 1988 should begin to show the classic symptoms of a demand-driven expansion—rising prices and interest rates. With continuing declines in the dollar, the underlying inflation rate will probably remain around 4 percent, up slightly from previous years. Interest rates, though likely to be volatile, should show a slow, steady upward trend through 1988.

Assuming no protectionist legislation is passed, the most likely scenario is for continued improvement in real net exports, brought on by the lower value of the dollar and continued growth abroad. Real export growth is the key to continuing expansion.
[R.M. Monaco (202) 786-1283]

THE BALANCE OF PAYMENTS AND AGRICULTURE

The last time the United States had a merchandise trade surplus was in 1975. At that time, agriculture had a $12 billion surplus[1] which more than offset the nonagricultural deficit of $3 billion.

Every year since, the agricultural trade balance has remained in surplus while the nonagricultural merchandise trade deficit has been increasing. But, the agricultural surplus has narrowed as the nonagricultural deficit has widened. The U.S. agricultural export surplus no longer can overcome the nonagricultural deficit.

U.S. international trade has been expanding relative to growth in the domestic economy. Both the farm and nonfarm sectors are more internationalized. From 1970 to 1986, the combined value of U.S. exports and imports grew 14.2 percent annually, while GNP rose 9.2 percent.

The various balance-of-payments accounts—agricultural and nonagricultural—move in similar ways, suggesting that they respond to the same structural influences (market supply and demand, technology transfer, and others) and macroeconomic forces.

Annual Compounded Growth Rate of Commodity Trade

	1975-77	1978-81	1982-86
		Percent	
Agriculture			
Exports	4.5	16.0	-9.5
Imports	17.9	6.8	3.7
Nonagriculture			
Exports	6.7	18.9	0.2
Imports	25.1	15.7	7.1

Source: U.S. Department of Commerce

Trade restrictions are often blamed for the circumstances leading to deteriorating commodity trade, both farm and nonfarm. But the trade deficit results primarily from macroeconomic phenomena such as a strong dollar, reversals in monetary policy, deficit spending, and the debt crisis among less developed countries (LDC's). Recent declines in agricultural trade, while affected by various trade barriers, are more strongly influenced by macroeconomic phenomena.

What Is the Balance of Payments?

The U.S. Balance of Payments Accounts of the Commerce and the Treasury Departments record all U.S. trade and financial transactions with foreigners. The accounts are usually summarized in three main components:

(1) the *current account*, which reports the trade in goods and services;

(2) the *private capital account*, which reports the flow in and out of the United States of bonds, stocks, lending, and firm ownership; and

(3) the *official settlements account*, which reports the change in U.S. foreign exchange reserves.

Mathematically, all payments to foreigners must equal all payments received from foreigners. A deficit in the current account must be balanced by an inflow of capital, or depletion of foreign currency reserves. Understanding these accounts helps in understanding U.S. agriculture's role in international trade.

The current account balance alone is often misleadingly referred to as the country's balance-of-payments position. But all three components of the accounts are linked, and changes in the private capital account are often more important to watch.

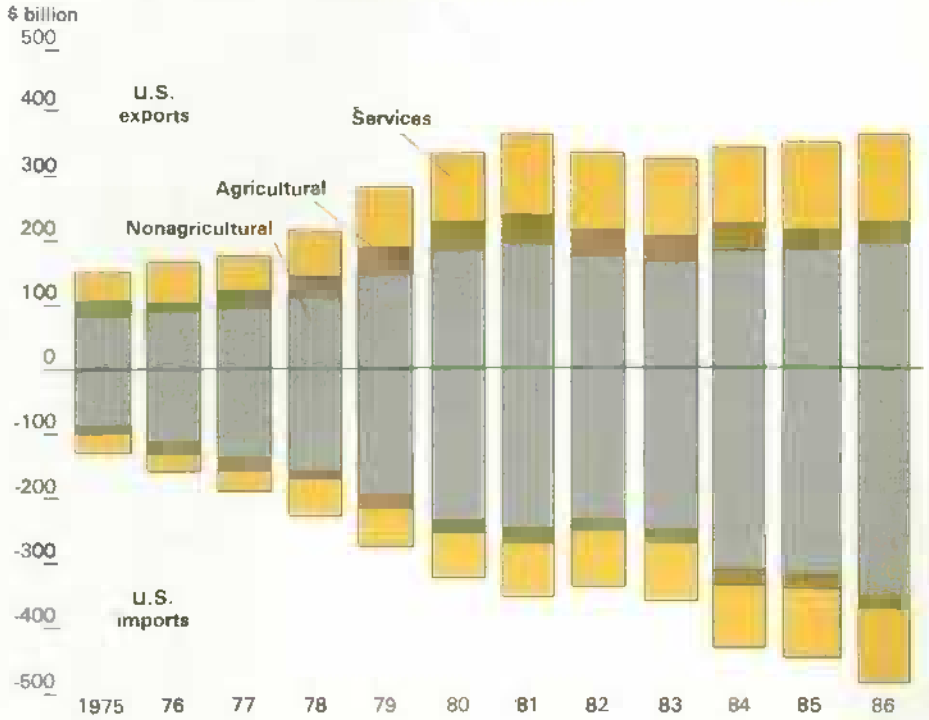
For example, if foreign investors desire to purchase more U.S. stocks and bonds (assuming no change in bank loans) than are needed to finance the U.S. current account deficit, the demand for dollars to acquire dollar-denominated assets will temporarily be larger than the supply of dollars associated with the current account deficit. This leads to a rise in the value of the dollar. The appreciation of the dollar will make exports more expensive while making imports less so, thereby increasing the deficit on the current account until the payments are balanced.

To understand how agriculture's role in the balance of payments has changed, the current and capital account changes between 1975 and 1986 will be examined. Macroeconomic policy changes and the rise of OPEC played a large role in changes in the current and capital accounts.

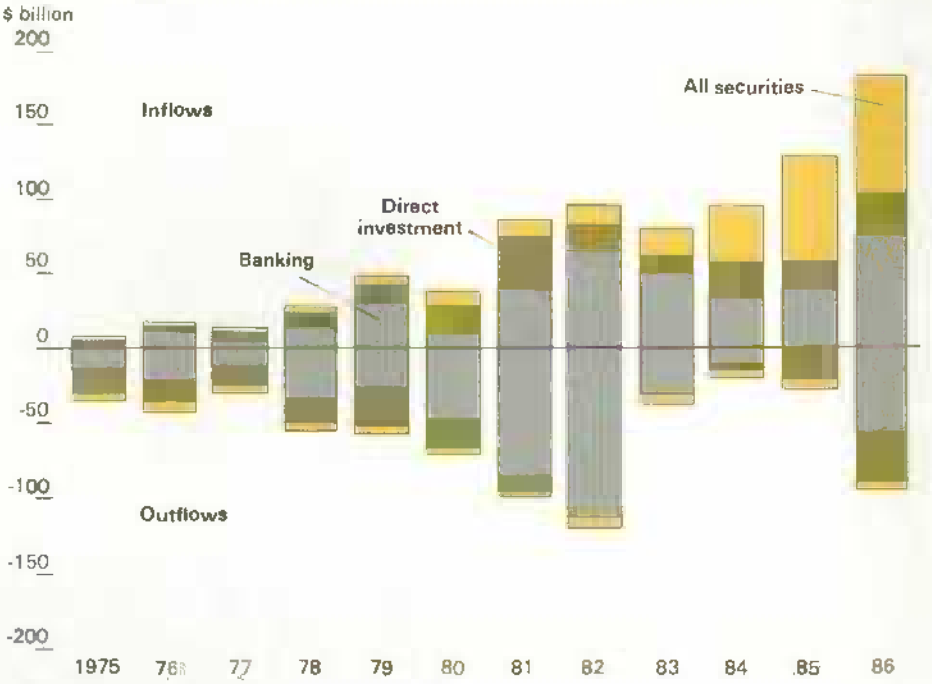
U.S. bank borrowing from abroad and the increasing demand for U.S. securities by foreigners enabled the United States to run large current account deficits in the 1980's. Contrary to what had been expected, the U.S. foreign currency reserves were not in danger of being drained. The increasingly internationalized U.S. economy has seen, and will continue to see, agriculture being affected by monetary and fiscal policy and past merchandise and service trade deficits—the same factors that affect nonfarm trade.

[1] Commerce Department figures.

Rise in Nonfarm Imports Dominates Current Accounts



In Capital Accounts, Banking Flows Show Widest Swings



Current Account Shows Foreign Contribution to Demand

The current account measures U.S. trade in current goods and services, and gifts and grants by the U.S. Government and private citizens. Its balance reflects the aggregate contribution of foreigners to U.S. domestic economic activity.

Merchandise trade is the largest part of the current account, and the U.S. merchandise trade account was in surplus from the end of World War II until 1971. Since 1971, the nonagricultural merchandise trade balance has consistently been in deficit. The factors that produced this deficit have dampened the agricultural trade surplus as well. The services account contains such diverse items as payment for consulting services and interest on bonds. Most of the movement in the services accounts has been in financial payments.

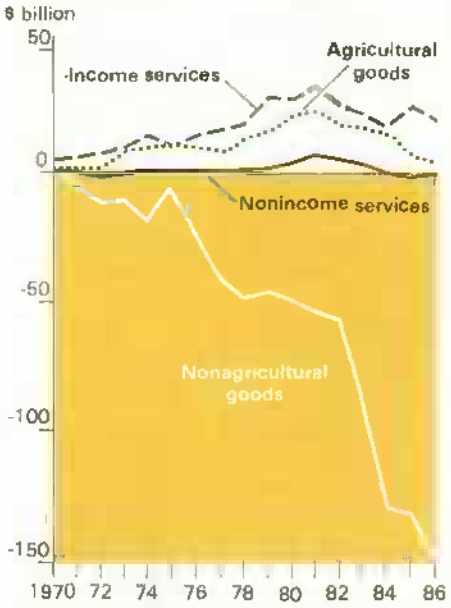
In late 1975, Federal expenditures rose and tax rates fell while the money supply grew moderately. This stimulus brought a stronger dollar and higher U.S. GNP growth. Both of these factors encouraged a large import growth in both agricultural and nonagricultural products. U.S. nonfarm exports grew only moderately; farm exports were buoyed by the very strong growth in world food demand. The net result was a $38-billion increase in the nonagricultural trade deficit, and a decline of $2 billion in the agricultural trade surplus from 1975 to 1977.

A loosening of monetary policy from 1975 to 1979, with tighter Government spending policy, brought a decline in the value of the dollar. The lower valued dollar boosted merchandise exports and slowed import growth. The net result was a halt from 1978 to 1981 in the rapid deterioration of the merchandise trade balance and an improvement in the agricultural balance.

The early 1980's saw major shifts in monetary and fiscal policy following tighter monetary policy initiated in October 1979. The 1981 tax cut and the continued buildup of U.S. defense expenditures pushed up interest rates and the value of the U.S. dollar.

The 40-percent appreciation in the real value of the dollar (as measured

Trade Deficit In Nonfarm Goods Outweighs Current Accounts Surplus in Other Trade



by the Federal Reserve's trade-weighted exchange index) for the two years from the beginning of 1980 to the end of 1981 brought a sharp decline in exports, more than offsetting the import decline brought by the world recession. The rise in the nonagricultural deficit and the decline in the agricultural trade surplus (as measured by Commerce) added $8 billion to the merchandise trade deficit in 1982.

In 1983, the world economic recovery began, fueled in part by expansionary U.S. policies. Other industrial nations maintained a relatively tight monetary policy. Consequently, while the U.S. economy surged, growth in major markets abroad, except Japan, lagged behind. At the same time, the rising Federal debt increased the demand for available funds, keeping real interest rates high.

The United States offered a return attractive to foreign investors. The dollar appreciated over 30 percent from the beginning of 1983 to the start of 1985. The strong dollar, the sluggish world economy, and U.S. agricultural pricing policies made U.S. agricultural exports decline from 1982 to 1986. The same forces brought substantial aggregate import growth. Higher imports resulted in a merchandise trade deficit which worsened by over $100 billion from 1982 to 1986. Despite small monthly improvements, the nominal trade deficit remains large in 1987.

Income from U.S. investments abroad appears in the services portion of the current account and ties the current account to the capital accounts. Current income to U.S. residents—including interest, dividends, and repatriated profits from the stock of previously purchased U.S.-owned foreign assets—is treated in the accounts as an export of services.

The analogous payments to foreigners on their holdings of U.S. assets is a service import in the U.S. current account. As foreign purchases of U.S. assets increase, income and interest paid to foreigners as a service outflow tends to increase. The services account thus reflects past as well as current international investment.

Capital Flows Directly Affect Trade Flows

The private capital account balance is the net flow of funds for investment in real and financial assets by private citizens, and government-to-government loans for long-term development projects. The private capital account is composed of three major parts:

(1) direct investment in foreign business enterprises and production facilities;

(2) banking activities, including the net international flow of bank borrowing and lending; and

(3) portfolio activities, or the net purchases and sales of private and government securities. Direct investment responds to expected growth in U.S. income. Banking activities and portfolio activity respond to relative exchange rates, interest rates, and price expectations.

Prior to 1983, U.S.-owned foreign assets greatly exceeded the foreign-owned U.S. assets, and the resulting income enhanced the current account balance. The recent net inflow of capital to the United States has increased the relative value of U.S. assets held by foreigners compared to the value of foreign assets owned by U.S. citizens. Interest and dividend payments going out of the United States have increased more than interest and dividend payments coming in. The result is a decline in the net service income flowing to the United States.

Logically, there was nothing extraordinary about this shift—money went where the return was best. What is extraordinary is the fact that beginning in 1983, the current account deficits have been financed almost entirely by an inflow of private capital, with little need to deplete U.S. official foreign currency reserves.

U.S. Banks Became Net Borrowers

Net borrowing by U.S. banks played a major role in this shift. During 1975-82, only once (in 1979) did U.S. banks borrow more than they lent abroad. However, since 1983, U.S. banks have consistently borrowed more than they have lent abroad, to finance the rising U.S. demand for funds.

The large change in capital transactions results from growing international trade in goods and services, including agricultural trade and trade with the financially troubled LDC's, facilitated by a growth in international banking.

During 1980-82, U.S. banks lent heavily to foreign countries. Many countries wishing to maintain a standard of living damaged by steep oil prices borrowed heavily from the United States, at high interest rates. Foreign loans of U.S. banks increased from $10 billion in 1980 to $65 billion in 1982.

During 1983-84, U.S. bank loans to foreign countries dwindled. Lower oil prices cut OPEC's U.S. bank deposits, reducing U.S. banks' ability to lend.

Several factors which began gathering force as early as 1979 reduced U.S. bank lendings abroad during 1983-85. First, the increased use of variable interest rates on international loans made borrowers vulnerable to interest rate fluctuations.

Second, the 1980-82 recession in the industrial nations, brought on by high oil prices and attendant weak export demand, reduced the export earnings of the LDC's. Finally, the onset of rapid U.S. economic expansion in 1983 and heavy borrowing by the U.S. Federal Government made domestic lending more attractive than foreign. These factors decreased U.S. banks' borrowings from $65 billion in 1982 to $34 billion in 1984.

Although U.S. bank lending abroad was over $50 billion in 1986, it did not approach the levels of 1981 or 1982. From 1982 to 1986, more money came into U.S. banks than went out; U.S. bank borrowings from abroad have grown sharply since 1982.

After bank transfers, the second largest component of U.S. capital outflow is direct investment. The economic conditions of the 1970's encouraged U.S. direct investment abroad.

However, the recession of 1980-82, the international debt repayment problems of LDC's, and the rapidly growing U.S. economy encouraged domestic as well as foreign investors to expand their investment in the United States rather than abroad. U.S. direct investment abroad fell each year from 1980 to 1983. From 1983 to 1986, however, U.S. direct investment increased each year. For every year since 1981, foreign direct investment in the United States has exceeded U.S. investment abroad.

High real U.S. interest rates and exchange rates during 1982-83 depressed foreign direct investments in the United States dramatically. Since 1983, however, the expectations of rising U.S. GNP and relatively low interest rates have caused foreign direct investments in the United States to rise. Foreign direct investment inflows into U.S. agriculture are insignificant.

The security capital account has seen the largest inflow of funds into the United States. U.S. investment in foreign securities (stocks and bonds) never exceeded $10 billion in any year. Foreign holdings of U.S. securities rose from $6 billion in 1975 to over $70 billion in 1986.

The most significant factor fueling the growing foreign purchase of U.S. securities is the expectation of relatively high and continued U.S. GNP growth. Even during the 1981 recession, the U.S. economy did well relative to the world economy.

Total Foreign Investment Up Sharply

The total amount of foreign capital coming to the United States increased in 8 of the last 12 years. Total U.S. bank borrowings from abroad, direct foreign investment in the United States, and foreign purchases of U.S. securities rose from $8 billion in 1975 to $183 billion in 1986. Since 1982, total U.S. direct investment abroad has never exceeded $100 billion.

The picture of U.S. exchanges with other countries as seen through the capital accounts is radically different in the 1980's from the 1970's. The funding of the U.S. current account deficit is increasingly dependent on loans to U.S. banks from abroad, foreign purchases of U.S. securities, and foreign direct investment in the United States. However, U.S. investment abroad was quite volatile in the 1980's. The net investment flow into the United States has been positive since 1982. As a result, the United States has become a net debtor country, owing more to foreigners than foreigners owe it.

The changing composition of U.S. capital inflows is reflected in the import side of the service account. The income and interest payments on bank loans and security investments dominated other service import components and rose steadily from $13 billion in 1975 to $68 billion in 1986. These large service imports, caused by the net debtor status of the United States, will continue well into the futnre.

Official Settlements Account Measures Foreign Reserves

The remaining account in the Balance-of-Payments accounts, the official settlement account, represents the net changes in reserve assets (foreign currencies, International Monetary Fund reserve position, special drawing rights, and gold) held by official institutions.

Official settlements equals the sum of the private capital account and the current account balances, so if a country runs a current account deficit and cannot attract sufficient private capital investment, it must pay off its net deficit using reserve assets. In recent years, the net change in this account has been quite small. The more important things to watch are the trade and capital flows, the links between them, and the response of both to monetary and fiscal policies.

World Monetary Conditions Affect Trade Balances

The theory of international finance says that current and capital account deficits and surpluses, and exchange rate movements, are the consequences of imbalances in the supply of and demand for money. The money supply is controlled by governments' monetary authorities, and money demand is influenced by private behavior as well as by monetary and fiscal policies. Thus, purely financial transactions do change interest rates and exchange rates, and thereby affect trade.

For example, an increase in the U.S. money supply will lower the interest rate and increase the domestic demand for goods, services, and securities, resulting in higher prices for domestic real and financial assets. At the same time, foreigners will reduce their purchases of both real and financial U.S. assets. These forces lead to increased import demand and decreased export demand for goods.

The upshot is that changes in individual balance-of-payments balances, interest rates, and exchange rates are symptoms and not causes. A resurgence in agricultural exports depends on more than price-setting and devaluation of the currency. It will follow from the same economic forces that will improve the nonagricultural trade balance, that is, public and private flows of capital among nations in response to changes in monetary and fiscal policies.

What's the Bottom Line For Agriculture?

Agriculture alone can not turn around the U.S. trade deficit. Even from the overly narrow focus of the current account balance, services and nonagricultural merchandise trade shares have grown while the agricultural share has declined.

The dramatic growth in capital flows since 1975 makes merchandise trade less important in determining the overall balance of payments. Agriculture makes up less than 1 percent of the private capital account. Thus, although capital flows affect agricultural trade, agriculture has little influence on capital flows and cannot possibly offset international banking and security activities.

Although U.S. agriculture has specific problems with trade barriers, the flow of agricultural trade largely mirrors the flow of nonagricultural trade. World macroeconomic policies and the resulting LDC debt repayment prob-

lems affect agriculture in much the same way as they affect manufacturing or mining. Recent high exchange and interest rates and low LDC growth rates have hampered all major trade-oriented sectors, not just agriculture.

Agriculture has become increasingly dependent on a free trade environment. As recent history suggests, agriculture is a ripe target for immediate retaliation against nonagricultural U.S. trade restrictions. In addition, the foreign response to restrictive trade policies may well come through capital markets. This may occur in several ways.

First, foreign citizens facing lower future export earnings will be less able to continue the huge flow of funds into the United States which they recently have provided. Second, foreign governments may retaliate against U.S. trade barriers by capital controls and lower foreign government purchases of U.S. Treasury securities.

The loss of foreign capital inflows could lead to very high U.S. interest rates. A high interest rate environment would cause a severe financial adjustment in capital-intensive U.S. industries—especially agriculture.

The United States has become a net debtor country, so that a substantial part of service export income will be offset by the outflow of funds to service the U.S. debt. Those funds will not be available domestically. As a result, high real U.S. interest rates are likely to continue. The growth of interest-sensitive sectors of the U.S. economy such as agriculture will be slower.

Agricultural trade is a small portion of the U.S. balance of payments. However, for many U.S. trading partners, especially LDC's with debt repayment problems, agricultural imports from the U.S. and their exports to the rest of the world constitute a major part of their trade. Effects of U.S. macroeconomic policy on world trade in agricultural products are more apparent in our trading partners' balance of payments than in our own.

For example, tight money and large U.S. budget deficits resulted in high real interest rates, increased capital outflow and debt-service payments in many less developed countries. Consequently, the LDC's cut back on major imports—including U.S. agricultural commodities—during 1982-1986. *[Mark Denbaly and David Torgerson (202) 786-1283]*

Food and Marketing

LABOR COSTS & THE MARKETING BILL

Labor is the largest component of the cost of processing and distributing farm foods. The food industry is the nation's largest employer, providing jobs for one out of every eleven U.S. workers, according to the Bureau of Labor Statistics.

The food labor market is composed of four major sectors. The largest is food service, which employs 53 percent of all food industry workers. The next is food retailing, comprising 26 percent. Manufacturing employs 14 percent and wholesaling, 7 percent.

Labor Market Growth Greatest In Retail & Food Service

Food industry employment grew 34 percent from 1977 to 1986. Of the four employment sectors, retail and food service experienced the largest employment increase since 1977. The most important reason is the increased number of single households and two-income families demanding convenience.

Grocery and convenience stores responded by increasing the size of their outlets, expanding operating hours, and offering new products (such as ready-to-eat foods) and services. Examples include supermarkets with in-store bakeries, delis, and salad bars. This contributed to increased demand for retail foodstore personnel.

The same demographic factors increased food service employment. Fast food sales accounted for almost 50 percent of commercial eating place sales in 1985. Because fast food employees are often paid minimum wages, labor costs have been held down. The high incidence of part-time workers who are paid entry-level wages—or less, if they receive tips—and the lack of collective bargaining for wages and benefits resulted in lower per-unit labor costs than in other food industry sectors.

Increase in Labor Costs Slows

Labor has represented a fairly constant share of total food marketing costs over the past 20 years. In 1967, labor costs comprised 42 percent of the marketing bill, which measures the cost of processing and distributing domestically produced farm foods. By 1978, labor's share had risen to 45 percent of the total bill. Labor costs have since remained at this level, except for a brief decline during 1981.

The relatively constant proportion masks a major phenomenon in total labor costs which began taking shape in 1983: total labor cost increases began to slow. In 1979, food industry employment increased 4 percent and labor costs 13.6 percent. In contrast, in 1986, employment grew 3.9 percent and labor costs rose only 6.2 percent.

The food industry came under pressure to significantly reduce labor costs in the 1980's, a period of recession and slowing inflation. For example, the Consumer Price Index for all food rose 2 and 3 percent in 1985 and 1986, compared with 10- and 11-percent rises in 1978 and 1979.

As a result, food industry managers were unable to maintain gross margins as they were during the previous period of rapidly rising prices. Food retailers were further challenged by price competitive warehouse stores and wholesale club outlets. The advent of streamlined production methods in meatpacking heightened efforts to reduce costs there as well.

Higher total labor costs, coupled with heightened competitive pressure, prompted union negotiators and management jointly to seek ways to preserve jobs while holding down labor costs. These include:

Wage concessions.—Food retailers demanded across-the-board wage cuts to achieve labor cost reductions. Unprofitable stores were closed and others were scheduled to shut their doors unless significant concessions were won. Kroger closed stores in several Midwestern cities, citing adverse wage differences among competitors there.

The willingness of management to close unprofitable operations in the absence of significant wage and benefit concessions resulted in postwar lows in the number of strikes. Workers often chose to preserve jobs by negotiating contracts that satisfied management goals.

Food retailers generally succeeded in reducing labor costs, as indicated by the average hourly earnings trends in the accompanying chart. Annual increases in average wages began to slow after 1982 for both food manufacturing and foodstore workers. Average annual changes in foodstore wages went from a 5.4 percent increase in 1982 to a 4.4-percent decline in 1986.

Hiring of part-time workers.—Part-time employment in foodstores increased from 35 percent in 1962 to 60 percent in 1985, according to *Progressive Grocer* magazine. The use of part-time workers lowers labor costs in three ways: They are paid less, they qualify for fewer benefits, and they reduce the need to pay overtime to full-time workers.

However, since many experienced part-timers switch when given the opportunity to work full time, higher turn over rates and pressure to raise part-time wages may offset some of the labor cost savings

Benefit reduction.—Benefit costs have become a higher proportion of total compensation over the last decade. Employee benefits comprised 20 percent of retail labor costs in 1976, but 24 percent by 1986. However, by 1986 their growth rate had slowed to about the same as the wage and salary growth rate, according to the Department of Commerce. In some recent contract negotiations, employees were required to pay a larger share of the benefit costs, and benefits have actually been reduced in many cases.

A major portion of the increased supplemental benefit cost was mandated by Congress. However, recent Social Security cost increases were not as great as in previous years. The maximum Social Security tax for employers rose 105 percent between 1977 and 1981, but only 41 percent from 1982 to 1986.

Food Industry Employment

Year	Manufacturing	Wholesaling	Stores	Service	Total food industry employment
	Percent of total				1,000
1967	29.5	8.5	25.9	36.1	6,062.3
1972	25.1	7.7	26.0	41.2	6,946.8
1977	20.4	7.3	25.1	47.1	8,377.6
1982	17.0	6.9	25.8	50.3	9,611.6
1985	14.8	6.8	25.6	52.7	10,835.9
1986	14.6	6.8	26.0	52.6	11,256.2

Two-tiered wage contracts.—These contracts provide lower wages and benefits to workers hired after a specified date. Pressure has developed to eliminate some two-tiered systems. Management and workers both complain about reduced productivity because employees on the lower tier are paid less for performing the same work. Senior employees, on the other hand, feel that the quality of new hires suffers because of the reduced wages on the lower tier.

The most common method of phasing out the two-tiered system is by awarding larger pay increases for lower paid employees over an extended period. Employees on the upper tier often receive lump sum bonuses in lieu of wage increases.

Backloaded contracts.—These contracts, which have been prevalent since 1983, provide for lower specified wage adjustments in the first year of a contract than in subsequent years. Prior to 1983, frontloaded contracts, in which the largest wage increase comes in the first year, were more common. Backloaded contracts generally have smaller wage increases, and subsequent wage increases are reduced as a result of the lower wage in the first year of the contract. In 1986, food store wages increased an average of just 1.5 percent for the first year and 1.7 percent for the remainder of the contract.

Lump sum payments.—Lump sum payments compensate for foregone wage increases, freezes, and cuts, and serve as a form of incentive pay. These payments are sometimes linked to a firm's profits or earnings. Lump sum benefits hold down labor costs because they have no effect on benefit levels, which are predicated on wage rates. Thus, they eliminate the compounding effects of wage increases and do not raise the wage rate base, which in turn serves as the foundation for subsequent wage negotiations.

For contracts with lump sum payments in 1986, average annual wage increases were .4 percent over the life of the contract. Without a lump sum, the average wage gain came to 3.6 percent in the first year and 4.1 percent for the life of the contract.

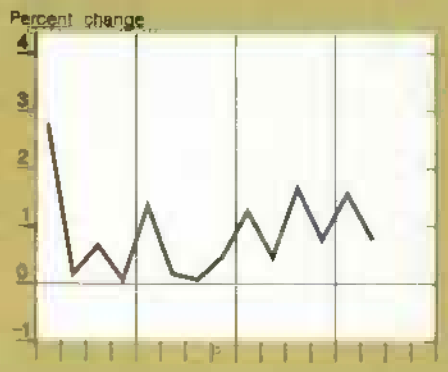
Cost-of-living adjustments (COLA'S).—These increases generally are tied to movements in the Consumer Price Index. In the recent past, high inflation and employee desire to maintain income parity led to demands for COLA's in labor settlements.

Lower inflation rates over the last few years have reduced the importance of COLA's in the labor cost equation. Moreover, COLA's were suspended or eliminated in many negotiated settlements in return for such features as lump sum payments. The total wage adjustment for contracts with COLA's consists of the specified wage adjustment plus the actual COLA. The COLA more than compensates for the smaller specified wage adjustment provided in contracts with these provisions.

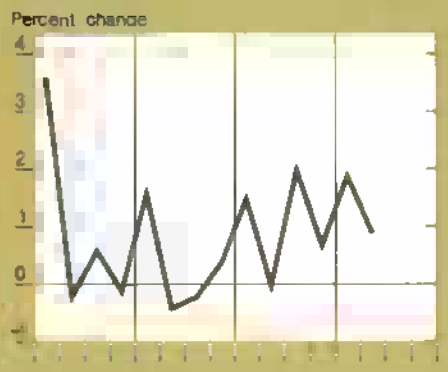
Mergers and acquisitions.—Merger and takeover activity may lower labor costs. Many settlements are terminated or renegotiated during company merger or acquisition. Management has offered early retirement to senior employees and severance pay for redundant workers as a means of reducing labor costs.

Technological improvements.— Labor-saving innovations lower costs. While food manufacturing and processing have enjoyed steady productivity increases, the food retailing and food service sectors have experienced pro-

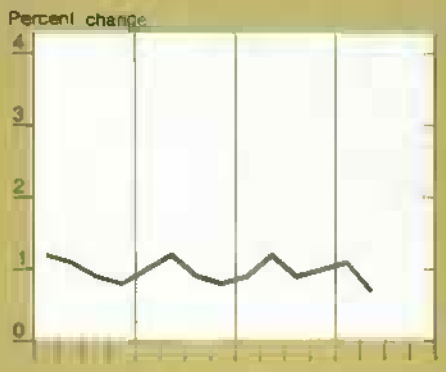
CPI: Total food[a]



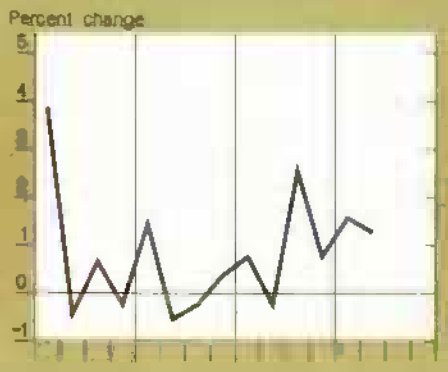
CPI: Food at home[a]



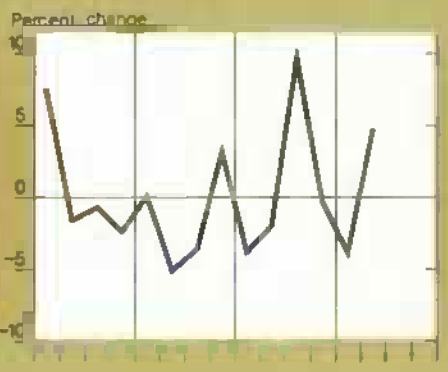
CPI: Food away from home[a]



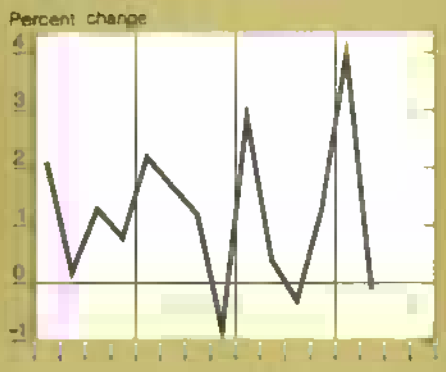
Retail cost of food[1]



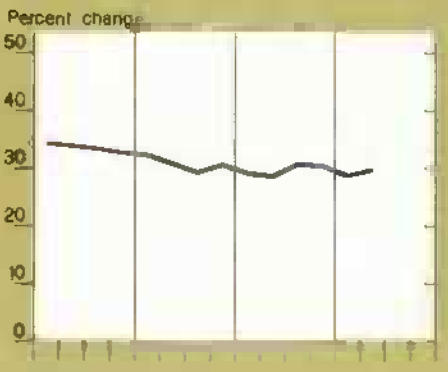
Farm value of food[1]



Farm-retail spread[1]



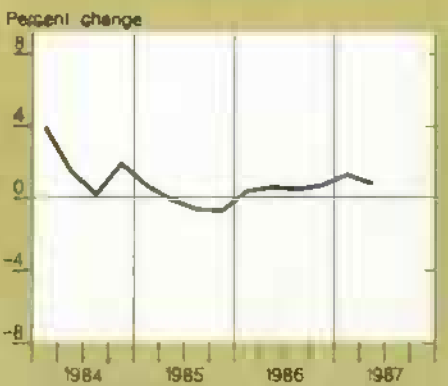
Farm value/retail cost[1]



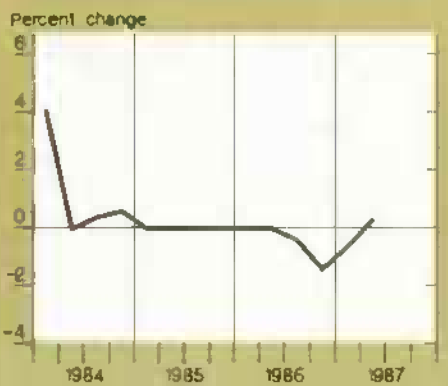
Food marketing cost index[2]

Index of hourly earnings[3,4]

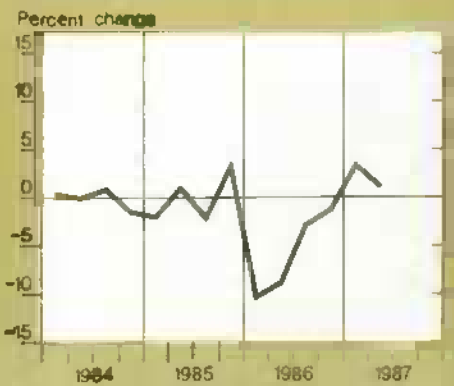
Index of packaging prices[4]



Index of rail freight rates[4]



Index of energy rates[4]



[a]CPI unadjusted. [1]Index based on market basket of farm foods. [2]Index of changes in labor, packaging, transportation, energy, and other marketing costs in food retailing, wholesaling, and processing. [3]Component of food marketing cost index.
All series expressed as percentage change from preceding quarter, except for "Farm value/retail cost" chart.

ductivity losses since 1977. Food retailing productivity gains achieved through item price scanning and labor-saving shelf and stocking innovations were offset by the additional staff required for the variety of service departments offered in many supermarkets.

Work rule provisions covering overtime, job descriptions, and minimum hours for part-time employees may decrease productivity by limiting the flexibility of labor management, thus offsetting some of the technological gains.

Demographic factors.—Many food retailing and food service employers are experiencing a shortage of entry-level applicants, particularly in suburban areas with low unemployment rates. Wages at this lower rung of the pay scale are often above the minimum wage, yet employers are unable to fill positions.

For example, Boston and Atlanta fast food chains offered starting pay 65 to 75 percent above the minimum wage in 1985 in order to attract workers to their operations. Food retailers acknowledge that the work is demanding and advancement is slow.

In the food service sector, and among fast food outlets in particular, employers are looking for senior citizens and retired persons to fill the labor gap. They expect persons over 55 to account for 25 percent of the food service work force over the next 25 years.

Legislation.—Minimum wage increase proposals could raise the wages of many entry-level employees. For example, 27 percent of all food service workers earned the minimum wage in 1986, according to a report commissioned by the National Restaurant Association. In addition, legislation has been proposed to increase health insurance coverage and cost and to require employers to grant "family leave" for childbearing.

Outlook: Moderately Larger Labor Cost Increases

What direction will labor costs follow? The outlook for inflation and employment is critical. Inflation rates are projected to be moderate through the mid-1990's (5 to 5.4 percent annually), with unemployment steadily declining to 6 percent under moderate growth assumptions, according to the Bureau of Labor Statistics (BLS).

Wages Are Moderating, But Food Marketing Labor Costs Still Rise

The absence of high inflation and unemployment rates implies stable food industry labor costs. At the same time, it is likely that managers have adjusted to the effects of reduced inflation, thereby easing competitive pressure to cut labor costs.

Continued substitution of machines for labor in food manufacturing (for example, boxed beef) and in wholesaling (automated warehousing) should foster worker productivity in these sectors. However, the labor-intensive food retailing and food service sectors are expected to experience continued slow productivity gains, especially in light of the additional staffing required for services and specialty departments.

Labor's bargaining position should strengthen slightly over the next few years, given the BLS projections of higher inflation and lower unemployment. With unemployment declining, the number of work stoppages may rise as unions attempt to win back concessions made after 1982.

The renewed strength of labor likely will narrow or end two-tiered wage scales, cut backloaded contract provisions, and lengthen hours for part-timers. Most 1987 contracts reflect low inflation by excluding COLA provisions, but as inflation rates approach 5 percent, more contracts are likely to contain COLA's. While lump sum or incentive payments will probably remain in many agreements, the size of the payments may increase, placing upward pressure on labor costs.

Wage Restructuring Effects Will Continue

Management will continue to benefit from the wage restructuring of the last several years. Wage increases will build from a reduced base in many instances. More flexible work rules will enable management to offset some of the expected wage gains through more effective use of labor.

Management will likely benefit from narrowing or elimination of two-tiered wage scales through higher productivity resulting from improved morale. Longer hours for part-time employees may reduce turnover and ease pressure to raise part-time wage rates.

Labor costs of nonunion companies will probably increase in a pattern similar to union labor costs. Increases in the minimum wage and the availability of entry-level workers are equally important to nonunion labor.

Should the minimum wage be raised, the food service sector will experience higher labor costs. The greatest impact will occur among fast food restaurants, since a large portion of workers there earn, at most, only slightly more than the minimum wage. Other food service workers eligible for tip income often receive the minimum wage, although they represent a smaller share of total employees compared with fast food outlets.

Entry-level wages are likely to remain above the minimum wage, because of the smaller numbers of younger workers. According to BLS, the number of persons age 16-24 will decrease to 21.3 million in 1990, compared with 24 million in 1984. Meanwhile, the number of jobs created between 1984 and 1990 will exceed available workers by 1 million, leaving an unfilled demand for workers.

Most labor contracts negotiated in 1987 will remain in force through 1990. Several facets of the current bargaining climate should prove to be of special significance for labor costs. These include the removal of two-tiered wage scales, moderate inflation, and labor shortages caused by demographic trends. The net effect of these factors likely will lead to larger labor cost hikes than have been prevalent over the last few years. However, these increases should not be as great as they were during the high inflation of the late 1970's and early 1980's. *[Howard Elitzak (202) 786-1860 and Phillip Kaufman 786-1866]*

Summary Data

Table 1.—Key Statistical Indicators of the Food & Fiber Sector

	1986		1987					1988	
	IV	Annual	I	II	III F	IV F	Annual F	I F	Annual F
Prices received by farmers (1977=100)	122	123	122	128	125	124	125	--	--
Livestock & products	144	138	143	148	147	142	145	137	137
Crops	99	106	100	107	103	106	104	--	--
Prices paid by farmers, (1977=100)									
Prod items	142	145	143	147	149	147	147	148	150
Commodities & services, int.. taxes, & wages	158	159	159	162	164	163	162	164	166
Cash receipts ($ bil) 1/	141	135	130	128	135	136	131-133	--	--
Livestock ($ bil)	73	72	73	72	76	72	72-74	--	--
Crops ($ bil)	67	64	57	56	59	64	58-60	--	--
Market basket (1967=100)									
Retail cost	294	289	299	303	300	298	300	--	--
Farm value	243	234	234	245	235	230	236	--	--
Spread	324	321	337	336	337	337	337	--	--
Farm value/retail cost (%)	30	30	29	30	30	30	30	--	--
Retail prices (1967=100)									
Food	324	320	330	332	334	334	332	--	--
At home	310	305	316	319	318	316	317	--	--
Away-from home	366	360	370	372	378	381	375	--	--
Agricultural exports ($ bil) 2/	7.7	26.3	6.9	6.5	6.9	7.9	28.0	7.0	--
Agricultural imports ($ bil) 2/	5.1	20.9	5.2	5.3	4.9	4.8	20.5	5.0	--
Production, *									
Red meat (mil lb)	9,752	39,051	9,485	9,238	9,576	9,740	38,039	9,560	38,580
Poultry (mil lb)	4,603	17,929	4,533	4,933	5,170	5,030	19,666	4,865	20,675
Eggs (mil doz)	1,457	5,715	1,443	1,433	1,425	1,470	5,771	1,430	5,750
Milk (bil lb)	33.9	144.1	34.9	37.3	35.4	34.1	141.7	35.6	144.0
Consumption, per capita:									
Red meat and poultry (lbs)	55.1	214.3	52.4	52.9	54.1	55.7	215.1	53.7	221.7
Corn beginning stocks (mil bu) 3/	4,039.5	4,039.5	10,304.1	8,248.2	6,331.7	4,929.0	4,929.0	--	--
Corn use (mil bu) 3/	1,989.0	6,496.0	2,057.6	1,917.0	1,401.1	--	--	--	--
Prices, 4/									
Choice steers--Omaha ($/cwt)	60.36	57.75	60.46	68.60	64-65	62-66	63-65	61-67	62-68
Barrows and gilts--7 mkts. ($/cwt)	53.08	51.19	48.11	56.17	59-60	48-52	52-54	41-47	37-43
Broilers--12-city (cts/lb)	56.2	56.9	50.0	48.2	48-49	42-46	47-48	40-46	40-46
Eggs--NY Gr. A large (cts/doz)	74.0	71.1	64.8	58.9	64-65	63-67	62-64	60-66	60-66
Milk--all at plant ($/cwt)	13.33	12.52	12.90	12.07	12.20-12.50	12.90-13.50	12.50-12.75	12.00-12.80	11.70-12.50
Wheat--Kansas city HRW ($/bu)	2.65	2.93	2.80	2.94	--	--	--	--	--
Corn--Chicago ($/bu)	1.62	2.35	1.56	1.82	--	--	--	--	--
Soybeans--Chicago ($/bu)	4.86	5.11	4.87	5.37	--	--	--	--	--
Cotton--Avg. spot mkt. (cts/lb)	48.0	60.0	55.5	64.7	--	--	--	--	--

	1979	1980	1981	1982	1983	1984	1985	1986	1987 F
Gross cash income ($ bil)	135.1	143.3	146.0	150.6	150.4	155.1	156.9	152.0	151-153
Gross cash expenses ($ bil)	101.7	109.1	113.2	112.5	113.3	116.3	109.6	100.1	95-97
Net cash income ($ bil)	33.4	34.2	32.8	38.1	37.1	38.8	47.3	52.0	54-58
Net farm income ($ bil)	27.4	16.1	26.9	23.5	12.7	32.0	32.3	37.5	41-45
Farm real estate values (1977=100) 5/	125	145	158	157	148	146	128	112	103

1/ Quarterly data seasonally adjusted at annual rates. 2/ Annual data based on Oct.-Sept. fiscal years ending with year indicated 3/ Dec.-Feb. first quarter; Mar.-May second quarter; June-Aug. third quarter; Sept.-Nov. fourth quarter; Sept.-Aug. annual. Use includes exports and domestic disappearance 4/ Simple averages 5/ As of February 1. F = forecast. * = commercial production.

Table 2.—U.S. Gross National Product & Related Data

	Annual			1986			1987	
	1984	1985	1986	II	III	IV	I	II R
	$ billion (Quarterly data seasonally adjusted at annual rates)							
Gross national product	3,772.2	4,010.3	4,235.0	4,211.6	4,265.9	4,288.1	4,377.7	4,447.7
Personal consumption expenditures	2,430.5	2,629.4	2,799.8	2,765.8	2,837.1	2,858.6	2,893.8	2,947.3
Durable goods	335.5	368.7	402.4	386.4	427.6	419.8	396.1	407.5
Nondurable goods	867.3	913.1	939.4	934.3	940.0	946.3	969.9	982.3
Clothing & shoes	146.7	157.2	167.5	167.2	169.8	169.6	174.0	176.0
Food & beverages	448.5	472.8	497.8	494.7	499.6	507.5	514.8	515.4
Services	1,227.6	1,347.5	1,458.0	1,445.1	1,469.5	1,492.4	1,527.7	1,557.5
Gross private domestic investment	664.8	641.6	671.0	679.4	660.8	660.2	699.9	700.9
Fixed investment	597.1	631.6	655.2	651.9	657.3	666.6	648.2	660.4
Change in business inventories	67.7	10.0	15.7	27.5	3.5	-6.4	51.6	40.4
Net exports of goods & services	-58.9	-79.2	-105.5	-100.8	-110.5	-116.9	-112.2	-118.6
Government purchases of goods & services	735.9	818.6	869.7	867.2	878.5	886.3	896.2	918.2
	1982 $ billion (Quarterly data seasonally adjusted at annual rates)							
Gross national product	3,501.4	3,607.5	3,713.3	3,704.7	3,718.0	3,731.5	3,772.2	3,793.7
Personal consumption expenditures	2,249.3	2,352.6	2,450.5	2,434.3	2,477.5	2,480.5	2,475.9	2,489.0
Durable goods	323.1	352.7	383.5	369.6	405.5	399.0	375.9	384.1
Nondurable goods	825.9	848.5	877.2	880.0	879.8	880.3	883.2	879.1
Clothing & shoes	142.2	147.9	158.0	159.0	160.4	158.4	160.3	157.4
Food & beverages	422.8	436.5	444.9	447.3	442.2	444.0	447.5	441.9
Services	1,100.3	1,150.4	1,189.8	1,184.7	1,192.2	1,201.1	1,216.9	1,225.9
Gross private domestic investment	658.4	636.1	654.0	665.6	645.0	631.0	671.8	670.5
Fixed investment	596.1	628.7	640.2	637.6	638.8	645.4	624.2	632.7
Change in business inventories	62.3	7.4	13.8	28.1	6.1	-14.4	47.6	37.8
Net exports of goods & services	-84.0	-108.2	-145.8	-146.8	-161.6	-151.8	-135.2	-133.3
Government purchases of goods & services	677.7	726.9	754.5	751.6	757.2	771.8	759.6	767.5
GNP implicit price deflator % change	3.7	3.2	2.6	2.9	3.6	.7	4.2	3.8
Disposable personal income ($bil)	2,668.6	2,841.1	3,022.1	3,022.4	3,038.2	3,061.6	3,125.9	3,135.4
Disposable per. income (1982 $bil)	2,469.8	2,542.2	2,645.1	2,660.2	2,653.2	2,656.7	2,674.6	2,647.8
Per capita disposable per. income ($)	11,257	11,872	12,508	12,525	12,560	12,626	12,865	12,891
Per capita dis. per. income (1982 $)	10,419	10,622	10,847	11,024	10,968	10,956	11,008	10,897
U.S. population, total, incl. military abroad (mil)	237.1	239.3	241.6	241.3	241.9	242.5	243.0	243.6
Civilian population (mil)	234.9	237.0	239.4	239.1	239.6	240.2	240.7	241.5

	Annual			1986	1987			
	1984	1985	1986	July	Apr	May	June	July P
	Monthly data seasonally adjusted							
Industrial production (1977=100)	121.4	123.8	125.1	124.9	127.4	128.3	128.8	129.8
Leading economic indicators (1967=100)	165.3	168.6	178.3	179.9	187.9	188.9	190.8	191.8
Civilian employment (mil. persons)	105.0	107.2	109.6	109.9	111.8	112.4	112.3	112.7
Civilian unemployment rate (%)	7.5	7.2	7.0	7.0	6.3	6.3	6.1	6.0
Personal income ($ bil annual rate)	3,108.7	3,327.0	3,534.3	3,540.3	3,703.7	3,713.3	3,723.2	3,737.5
Money stock-M2 (daily avg) ($bil) 1/	2,373.7	2,566.5	2,799.8	2,693.8	2,837.9	2,838.7	2,840.3	2,846.0
Three-month Treasury bill rate (%)	9.58	7.48	5.98	5.84	5.76	5.75	5.69	5.79
Aaa corporate bond yield (Moody's) (%)	12.71	11.37	9.02	8.88	8.85	9.33	9.32	9.42
Housing starts (thou) 2/	1,750	1,742	1,805	1,786	1,643	1,606	1,597	1,611
Auto sales at retail, total (mil)	10.4	11.0	11.4	10.7	10.5	9.6	10.0	10.5
Business inventory/sales ratio	1.48	1.50	1.54	1.56	1.50	1.50	1.49	--
Sales of all retail stores ($ bil)	107.5	115.0	121.2	120.3	125.0	124.9	126.6 P	127.6
Nondurable goods stores ($ bil)	68.5	71.8	73.8	73.9	76.8	77.1	77.5 P	77.8
Food stores ($ bil)	22.6	23.7	24.6	24.7	25.3	25.3	25.5 P	25.4
Eating & drinking places ($ bil)	10.4	11.1	12.1	12.1	12.7	12.7	12.8 P	12.7
Apparel & accessory stores ($ bil)	5.6	6.2	6.7	6.7	7.0	7.0	7.2 P	7.2

1/ Annual data as of December of the year listed. 2/ Private, including farm. P = Preliminary. R = revised.

Information contact: James Malley (202) 786-1283.

Table 3.—Foreign Economic Growth, Inflation, & Export Earnings

	Average 1970-74	Average 1975-79	1980	1981	1982	1983	1984	1985	1986 P	1987 F
						Annual percent change				
Total foreign										
Real GNP	5.5	3.7	2.6	1.6	1.7	2.0	3.2	3.0	2.8	2.5
CPI	10.2	14.0	16.7	15.8	14.4	18.7	21.3	21.1	11.7	25.5
Export earnings	27.5	14.6	22.6	-2.2	-6.8	-2.5	5.6	1.3	12.5	11.3
Developed less U.S.										
Real GNP	4.8	3.1	2.3	1.3	1.1	1.9	3.4	3.3	2.4	2.2
CPI	8.4	9.4	10.9	9.6	8.1	6.1	5.1	4.7	2.8	2.8
Export earnings	23.9	14.9	17.0	-3.3	-4.2	-0.5	6.1	4.7	18.4	11.7
Centrally planned										
Real GNP	5.1	3.5	1.5	2.1	2.7	3.4	3.7	2.8	3.9	3.6
Export earnings	19.4	16.1	16.5	3.4	6.0	8.2	1.5	-5.1	1.8	7.6
Latin America										
Real GNP	7.4	5.1	5.3	0.7	-0.5	-2.7	3.3	3.6	3.7	1.4
CPI	23.5	53.7	61.3	64.9	72.6	126.2	174.3	179.2	90.9	238.5
Export earnings	28.1	12.8	30.1	4.8	-9.7	-0.1	7.7	-6.1	-15.1	3.5
Africa & Middle East										
Real GNP	8.8	6.4	1.3	0.0	1.4	0.1	1.1	0.1	-1.2	0.1
CPI	8.7	16.4	22.1	19.7	12.0	19.0	5.9	5.3	8.2	8.1
Export earnings	49.6	43.2	38.5	-7.0	-18.9	-17.2	-8.4	-7.8	-25.7	13.0
Asia										
Real GNP	6.0	6.8	6.3	6.6	3.6	6.6	5.4	4.0	5.8	5.5
CPI	13.0	8.4	16.4	14.1	7.3	7.7	8.5	5.4	5.0	5.7
Export earnings	30.1	19.4	27.3	5.0	-0.6	3.5	13.3	-1.7	7.2	10.7

P = preliminary F = forecast. Information contact: Timothy Baxter (202) 786-1688.

Farm Prices

Table 4.—Indexes of Prices Received & Paid by Farmers, U.S. Average

	Annual			1986	1987					
	1984	1985	1986	Aug	Mar	Apr	May	June	July R	Aug P
					1977=100					
Prices received										
All farm products	142	126	123	125	123	125	129	131	128	125
All crops	139	120	106	102	102	102	109	111	106	98
Food grains	144	133	108	91	102	103	105	97	92	92
Feed grains & hay	145	122	96	87	80	84	92	90	86	81
Feed grains	148	122	96	84	77	78	85	87	82	77
Cotton	108	93	81	77	83	87	107	116	116	98
Tobacco	153	153	138	128	131	130	130	130	127	127
Oil-bearing crops	109	84	77	76	72	74	78	80	79	75
Fruit, all	202	181	167	186	170	166	170	199	167	147
Fresh market 1/	220	192	175	200	177	173	178	212	177	153
Commercial vegetables	135	127	129	122	158	141	137	128	134	127
Fresh market	133	122	123	114	160	139	132	120	132	123
Potatoes & dry beans	157	124	114	136	132	143	174	173	162	132
Livestock & products	146	136	138	148	142	147	148	150	149	150
Meat animals	151	142	145	157	156	165	169	173	170	171
Dairy products	139	131	128	127	129	127	124	123	124	126
Poultry & eggs	135	118	128	148	111	112	107	104	105	110
Prices paid										
Commodities & services, interest, taxes, & wage rates	165	163	159	--	--	162	--	--	164	--
Production items	155	151	145	--	--	147	--	--	149	--
Feed	135	116	108	--	--	101	--	--	105	--
Feeder livestock	154	154	153	--	--	179	--	--	182	--
Seed	151	153	148	--	--	148	--	--	149	--
Fertilizer	143	135	124	--	--	117	--	--	117	--
Agricultural chemicals	128	128	127	--	--	123	--	--	123	--
Fuels & energy	201	201	162	--	--	164	--	--	170	--
Farm & motor supplies	147	148	144	--	--	145	--	--	145	--
Autos & trucks	182	193	198	--	--	210	--	--	212	--
Tractors & self-propelled machinery	181	178	174	--	--	174	--	--	174	--
Other machinery	180	183	184	--	--	186	--	--	186	--
Building & fencing	138	136	136	--	--	136	--	--	136	--
Farm services & cash rent	152	150	150	--	--	148	--	--	148	--
Interest payable per acre on farm real estate debt	257	238	213	--	--	207	--	--	207	--
Taxes payable per acre on farm real estate	132	133	134	--	--	136	--	--	136	--
Wage rates (seasonally adjusted)	151	154	160	--	--	171	--	--	171	--
Production items, interest, taxes, & wage rates	162	157	151	--	--	153	--	--	154	--
Ratio, Prices received to prices paid 2/	86	78	77	78	77	77	80	81	78	76
Prices received (1910-14=100)	650	585	560	573	560	573	589	597	583	569
Prices paid, etc. (Parity index) (1910-14=100)	1,132	1,120	1,087	--	--	1,116	--	--	1,127	--
Parity ratio (1910-14=100) 2/	57	52	51	--	--	51	--	--	52	--

1/ Fresh market for noncitrus; fresh market and processing for citrus. 2/ Ratio of index of prices received for all farm products to index of prices paid for commodities and services, interest, taxes, and wage rates. Ratio derived using the most recent prices paid index. Prices paid data will be published in January, April, July, and October. P = preliminary. R = revised

Information Contact: National Agricultural Statistics Service (202) 447-5446.

Table 5.—Prices Received by Farmers, U.S. Average

	Annual*			1986	1987					
	1984	1985	1986	Aug	Mar	Apr	May	June	July R	Aug P
Crops										
All wheat ($/bu)	3.46	3.20	2.71	2.26	2.58	2.62	2.66	2.45	2.31	2.31
Rice, rough ($/cwt)	8.32	7.85	5.04	3.95	3.68	3.64	3.74	3.68	3.65	3.65
Corn ($/bu)	3.05	2.49	1.96	1.73	1.47	1.52	1.66	1.69	1.60	1.47
Sorghum ($/cwt)	4.60	3.97	3.11	2.66	2.45	2.58	2.69	2.80	2.68	2.56
All hay, baled ($/ton)	75.38	69.93	61.80	58.10	57.90	62.90	73.30	63.20	61.60	61.80
Soybeans ($/bu)	7.02	5.42	5.00	4.89	4.73	4.90	5.20	5.36	5.25	4.95
Cotton, Upland (cts/lb)	65.6	56.1	54.7	46.2	50.0	52.6	64.8	71.5	71.7	59.1
Potatoes ($/cwt)	5.69	3.92	4.94	5.72	5.28	5.91	7.45	7.43	6.89	5.38
Lettuce ($/cwt)	11.00	10.90	11.90	10.40	15.30	9.22	8.54	8.71	16.90	18.60
Tomatoes ($/cwt)	25.60	24.10	25.10	20.30	32.10	26.90	28.30	26.00	20.80	15.90
Onions ($/cwt)	11.70	9.97	9.80	9.78	19.40	26.30	23.10	17.00	14.30	9.77
Dry edible beans ($/cwt)	18.70	17.60	19.00	17.00	19.10	17.80	18.00	17.60	17.60	17.70
Apples for fresh use (cts/lb)	15.5	17.3	NA	30.0	19.6	19.4	21.4	25.7	25.3	15.5
Pears for fresh use ($/ton)	300.00	349.00	393.00	341.00	403.00	355.00	338.00	630.00	295.00	234.00
Oranges, all uses ($/box) 1/	5.95	7.41	4.18	4.03	4.79	4.94	5.26	6.22	4.59	4.17
Grapefruit, all uses ($/box) 1/	2.68	4.01	4.21	6.76	4.76	5.21	4.41	5.08	4.50	4.14
Livestock										
Beef cattle ($/cwt)	57.56	53.96	52.84	54.40	59.30	62.60	63.00	62.50	61.10	61.90
Calves ($/cwt)	60.23	62.40	60.89	61.10	72.50	75.10	77.30	78.80	80.30	81.60
Hogs ($/cwt)	47.61	43.88	50.10	62.10	47.40	50.80	54.40	60.30	59.60	58.80
Lambs ($/cwt)	60.33	68.07	69.10	69.50	80.80	86.10	90.10	83.50	78.70	75.50
All milk, sold to plants ($/cwt)	13.46	12.75	12.50	12.30	12.50	12.30	12.00	11.80	12.00	12.20
Milk, manuf. grade ($/cwt)	12.49	11.72	11.46	11.30	11.30	11.20	11.00	10.90	10.90	11.10
Broilers (cts/lb)	33.7	30.1	34.5	43.9	29.1	28.6	30.0	27.6	28.1	31.6
Eggs (cts/doz) 2/	70.3	57.4	60.3	62.4	54.4	55.6	50.1	50.9	51.4	50.6
Turkeys (cts/lb)	46.6	47.2	44.4	50.9	37.6	36.5	35.0	34.5	33.1	31.4
Wool (cts/lb) 3/	79.5	63.3	66.8	65.9	71.0	96.8	111.0	94.9	86.6	84.2

1/ Equivalent on-tree returns. 2/ Average of all eggs sold by producers including hatching eggs and eggs sold at retail. 3/ Average local market price, excluding incentive payments. *Calendar year averages, except for potatoes, dry edible beans, apples, oranges, and grapefruit, which are crop years. P = preliminary. R = revised. NA = not available.

Information contact: National Agricultural Statistics Service (202) 447-5446.

Producer and Consumer Prices

Table 6.—Consumer Price Index for All Urban Consumers, U.S. Average (Not Seasonally Adjusted)

	Annual	1986		1987 1/						
	1986	July	Dec	Jan	Feb	Mar	Apr	May	June	July
						1967=100				
Consumer price index, all items	328.4	328.0	331.1	333.1	334.4	335.9	337.7	338.7	340.1	340.8
Consumer price index, less food	328.6	328.0	330.6	332.2	333.6	335.4	337.3	338.3	339.6	340.5
All food	319.7	320.1	325.2	328.9	330.1	330.0	331.0	332.5	334.1	333.6
Food away from home	360.1	360.8	367.1	368.6	369.6	370.9	371.5	372.3	373.8	374.9
Food at home	305.3	305.5	310.2	315.2	316.6	315.8	316.9	318.8	320.4	319.1
Meats 2/	273.9	272.9	286.3	288.6	285.3	286.4	286.8	291.8	297.1	299.8
Beef & veal	271.4	267.6	279.5	282.9	280.7	282.7	285.8	292.6	297.6	297.7
Pork	273.8	278.0	294.2	294.0	289.8	287.2	284.4	289.4	297.7	305.8
Poultry	232.7	240.3	241.9	238.4	237.0	234.1	231.1	230.5	228.3	226.1
Fish	443.2	447.3	457.6	478.0	479.9	487.4	488.7	486.6	484.2	489.7
Eggs	186.3	175.2	198.6	193.2	187.4	180.0	174.6	169.5	161.2	168.2
Dairy products 3/	258.4	258.4	262.2	263.3	264.7	263.7	263.2	264.3	263.7	263.2
Fats & oils 4/	287.8	287.3	286.0	293.2	290.3	294.6	291.8	293.3	291.4	292.9
Fresh fruit	369.3	382.2	355.8	389.1	406.7	403.9	417.8	431.8	437.5	416.7
Processed fruit 5/	163.3	161.8	163.1	165.7	166.3	167.5	168.4	170.5	171.0	170.2
Fresh vegetables	330.3	325.0	342.5	356.3	377.7	364.7	379.4	379.0	396.3	371.0
Potatoes	307.3	356.0	332.0	340.1	357.0	355.3	371.4	406.1	436.1	444.6
Processed vegetables 5/	147.4	148.4	147.4	150.2	148.5	152.1	150.6	151.2	151.9	152.3
Cereals & bakery products 5/	325.8	326.3	329.5	331.5	332.7	333.2	335.6	336.5	337.0	339.4
Sugar & sweets	411.1	412.4	411.8	415.8	415.8	417.2	417.4	417.7	419.3	418.8
Beverages, nonalcoholic	478.2	478.3	470.2	482.6	481.9	475.4	469.8	467.8	462.6	458.5
Apparel commodities less footwear	188.8	183.3	191.7	187.7	188.0	196.1	198.8	198.5	194.7	190.7
Footwear	211.2	209.1	214.0	209.9	211.0	216.5	219.2	220.8	218.8	214.3
Tobacco & smoking products	351.0	354.3	357.6	364.9	368.3	369.6	370.4	370.8	372.7	379.8
Beverages, alcoholic	239.7	240.4	240.8	242.5	243.2	243.6	244.3	245.0	245.8	246.7

1/ Beginning January 1987 the CPIs are calculated using 1982-84 expenditure patterns and updated population weights. The old series were based on 1972-73 expenditure patterns. 2/ Beef, veal, lamb, pork, and processed meat. 3/ Includes butter. 4/ Excludes butter. 5/ December 1977=100.

Information contact: Ralph Perlett (202) 786-1870.

Table 7.—Producer Price Indexes, U.S. Average (Not Seasonally Adjusted)

	Annual			1986	1987					
	1984	1985	1986 P	July	Feb	Mar R	Apr	May	June	July
					1967=100					
Finished goods 1/	291.1	293.7	289.7	287.6	292.3	292.6	295.0	296.3	296.8	297.8
Consumer foods	273.3	271.2	278.1	280.4	280.8	280.3	283.3	286.7	287.7	287.6
Fresh fruit	253.0	256.1	262.1	275.6	261.3	268.0	250.3	251.1	260.3	256.1
Fresh & dried vegetables	278.3	245.1	241.1	240.0	237.2	260.0	258.5	252.2	284.9	282.2
Dried fruit	386.6	363.5	377.4	377.4	385.1	385.6	384.9	384.9	383 6	390 6
Canned fruit & juice	312.4	323.1	315.1	315.2	322.1	323.9	321.4	324.5	331 1	330 2
Frozen fruit & juice	351.0	362.3	314.8	311.8	335.3	336.7	341.3	341.7	343.1	343.2
Fresh veg. excl. potatoes	218.1	205 9	204.0	191.7	188.6	213.2	209.8	193.8	214.0	209.2
Canned veg. and juices	252.6	246.9	245.1	245.0	246.9	253.8	256.4	251.3	257.5	247.5
Frozen vegetables	291.0	298.4	298.5	298.1	301.2	300.9	302.6	302.3	296.9	300.4
Potatoes	397.7	304.3	312.6	352.6	355.8	362.1	366.1	413.1	397.4	398.9
Eggs	210.8	171.0	177.8	167.3	175.6	160.3	161.0	150.9	143.2	152.4
Bakery products	299.1	313.7	321.3	322.0	321.3	321.9	321.8	323.2	324.8	326.4
Meats	236.8	227.9	235.2	242.2	240 0	234.8	250.6	265.0	269.1	269.3
Beef & veal	237.1	221.3	216.0	215.6	222.7	224.2	240.0	251.4	248.7	246.2
Pork	226.5	223.8	250.9	273.8	246.2	226.2	254.0	279.3	295.5	298.1
Processed poultry	206.0	197.3	207.8	228.0	192.2	190.6	188.8	192.9	183.3	181.4
Fish	476.0	484.2	530.4	510.8	608.8	591.5	581.7	640.0	602.9	599.7
Dairy products	251.7	249.4	248.8	247.7	252.3	252 3	252.5	250.7	251.0	252.4
Processed fruits & vegetables	294 3	286.3	287.9	286.9	295.1	297.4	298.7	297.5	300.1	297.0
Shortening & cooking oils	311 6	290.6	242.4	238.1	238.9	238.6	239.7	244.8	242.7	243.7
Consumer finished goods less foods	294 1	297.3	283.5	276.3	285.3	286.3	288.9	289.6	290.1	292.0
Beverages, alcoholic	209.8	213.0	217.8	218.1	219.5	218.3	220.5	219.5	220.2	217.7
Soft drinks	340.2	343.6	349.7	349.7	353.7	355.2	357.9	356.7	356.5	355.3
Apparel	201.3	204.1	206.5	207.0	208.3	209.1	208.9	209.0	210.1	211.0
Footwear	251.7	256.7	261.8	261.0	263.5	265.5	264.9	266.5	263.4	268.5
Tobacco products	398.4	428.1	460.4	469.2	487.4	487.4	487.5	487.5	487.5	509.3
Intermediate materials 2/	320 0	318.7	307.6	304.8	308.9	309.3	310.9	312.7	314.8	317.1
Materials for food manufacturing	271.1	258.8	251.0	251.7	251.6	250 4	255.3	261.5	261.2	262.0
Flour	185.2	183.0	173.4	167.0	169.0	169.4	171.1	177.4	168.9	167.2
Refined sugar 3/	173.5	165.6	166.4	165.0	169.5	169.3	171.3	170.8	171 9	172.7
Crude vegetable oils	262.2	219.6	135.8	132.4	129.1	130.7	129.1	144.6	134.1	131.5
Crude materials 4/	330.8	306.1	280.3	277.7	287.2	288.6	295.5	304.7	304.9	307.8
Foodstuffs & feedstuffs	259.5	235 0	231.0	234.4	229 9	228.6	239.4	251.3	246.5	243.1
Fruits & vegetables 5/	278.1	260.5	261.2	266.8	258.6	274.8	265.8	262.4	285.5	282.0
Grains	239.7	202.8	167.2	152.3	140.6	142.3	149.8	166.6	156.0	145.0
Livestock	251.8	229.9	236.1	245.3	247.1	247 6	267.1	280.5	280.9	274.4
Poultry, live	240.6	226.2	248.8	296.7	199.8	199.5	202.0	216.4	180.7	196.3
Fibers, plant & animal	228.4	197.8	179.3	220.6	188.9	182.4	199.6	220.6	235.7	243.7
Fluid milk	278.3	264.6	256.9	251.3	267.4	260.5	256.1	252.5	249.0	253.5
Oilseeds	253.3	202.7	196.2	198.2	201.6	199.9	206.7	223.5	226.6	221 0
Tobacco, leaf	274.6	274.1	243 0	248.4	230.8	230.8	229.1	229.1	229.1	229 1
Sugar, raw cane	312.0	291.3	292.2	293.7	304.8	305.8	307.1	308.1	309.0	310.8
All commodities	310.3	308.7	299.8	297.4	302.2	302.7	305.1	307.3	308.5	310.2
Industrial commodities	322.6	323.8	312.1	308.5	314.9	315.7	317.4	318.6	320 2	322.6
All foods 6/	269.2	264.5	268.4	270.5	270.9	270.2	273 3	277.7	278.5	278.5
Farm products & processed foods & feeds	262.4	250.5	252.0	254.2	252.8	252.0	257.0	263.6	263.0	261.8
Farm products	255.8	230 5	224.7	228.6	222.9	223.3	231.3	241.1	239.1	236.3
Processed foods & feeds 6/	265.0	260.4	265.1	266.8	267.6	266.2	269.8	274.7	274.8	274 4
Cereal & bakery products	270.5	279.9	281.8	281.0	281.1	282.2	282.0	284.2	283.4	283.7
Sugar & confectionery	301 2	291.0	295.7	296.0	298.8	298.8	300.3	301 2	304.5	307.4
Beverages	273.1	276.6	294.3	296.6	289.9	290.1	291.2	290.3	290 4	288.1

1/ Commodities ready for sale to ultimate consumer. 2/ Commodities requiring further processing to become finished goods. 3/ All types and sizes of refined sugar. (Dec. 1977=100). 4/ Products entering market for the first time which have not been manufactured at that point. 5/ Fresh and dried. 6/ Includes all raw, intermediate, and processed foods (excludes soft drinks, alcoholic beverages, and manufactured animal feeds). (1977=100). R = revised. P = preliminary.

Information contact: Bureau of Labor Statistics (202) 523-1913.

Table 8.—Farm-Retail Price Spreads

	Annual			1986	1987					
	1983	1984	1985	1986	July	Feb	Mar	Apr	May	June	July
Market basket 1/											
Retail cost (1967=100)	268.7	279.3	282.6	288.7	288.9	299.1	298.9	299.8	302.7	305 7	305 2
Farm value (1967=100)	242.3	255.4	237.2	234.1	239.2	234.2	236.5	240.1	246.8	249.4	248.4
Farm-retail spread (1967=100)	284.3	293.3	308.3	320.8	318.0	337 2	335.5	334.9	335.5	338.8	338.5
Farm value/retail cost (%)	33.4	33.9	31.1	30.0	30.7	29.0	29.3	28.7	30.2	30.2	30.1
Meat products											
Retail cost (1967=100)	267.2	268.1	265.5	273.9	272.9	285.3	286.1	285.5	291.5	297.7	298.8
Farm value (1967=100)	235.8	241.5	221.8	229.1	237.4	231.2	232.4	245.2	260.5	270.1	269.2
Farm-retail spread (1967=100)	304.0	299.1	316.6	326.2	314 5	348.6	349.0	332.6	327.8	330.1	335.7
Farm value/retail cost (%)	47.6	48.6	45.1	45.1	46.9	43.7	43.8	46.3	48.2	48.9	48.4
Dairy products											
Retail cost (1967=100)	250.0	253.2	258.0	258.4	258.4	264.3	263 2	263.0	263.7	263.2	263.2
Farm value (1967=100)	262.1	258.8	248.2	241 5	238.6	252 3	245.5	241 8	238.0	237.1	238.8
Farm-retail spread (1967=100)	239.3	248.3	266.5	273.3	275.8	274.8	278.7	281.6	286.3	286.1	284.6
Farm value/retail cost (%)	49.0	47.8	45.0	43.7	43.2	44.6	43.6	43.0	42.2	42.1	42.4
Poultry											
Retail cost (1967=100)	197.5	218.5	216.4	232 7	240.2	237.0	234.1	230.7	230.4	228.6	226.1
Farm value (1967=100)	213.0	249.9	234.9	255.4	305.1	216.7	214 6	218.8	216.0	201.9	202.6
Farm-retail spread (1967=100)	182.4	188.1	198.4	210.9	177.6	256.6	253.0	245.2	244.3	254.4	248.8
Farm value/retail cost (%)	53 1	56.3	53.4	54.0	62.4	45.0	45.1	46.0	46.1	43.4	44.1
Eggs											
Retail cost (1967=100)	187.1	209.0	174.3	186.3	175.2	187.2	180.3	175.0	169.9	161.5	168.2
Farm value (1967=100)	206.1	230.3	178.9	192.7	184.4	178.2	164.9	166.7	143.7	147.5	149.9
Farm-retail spread (1967=100)	159.5	178.2	167.6	177.1	161.9	198 8	202.6	187.0	207.8	181.7	194.6
Farm value/retail cost (%)	65.1	65.1	60.7	61.1	62.2	56.6	54.0	56.3	50.0	54.0	52.7
Cereal & bakery products											
Retail cost (1967=100)	292.5	305.3	317.0	325.8	326.3	332.3	332.9	335.0	335.6	336 3	338 4
Farm value (1967=100)	186.6	192.0	175.9	142.3	132.2	130.4	131.5	131.0	133.8	128.0	122.0
Farm-retail spread (1967=100)	314.0	328.7	346.2	363 7	366.5	374.1	374.6	377.2	377.4	379.4	383.1
Farm value/retail cost (%)	11.1	10.8	9.5	7.5	7.0	6.7	6.8	6.7	6.8	6.5	6.2
Fresh fruits											
Retail cost (1967=100)	303.6	345.3	383.5	390.1	406.8	427.1	429.2	442.1	464 4	476.2	459.9
Farm value (1967=100)	220.6	315.1	302.7	285.3	290.8	304.8	282.5	257.3	297.8	312.1	289.5
Farm-retail spread (1967=100)	340.8	358.9	419.8	437 1	459.0	482 0	495.1	525.1	538.2	549.9	536.4
Farm value/retail cost (%)	22.5	28.3	24.4	22.7	22.1	22.1	20.4	18.0	18.9	20.3	19.5
Fresh vegetables											
Retail costs (1967=100)	298.3	331.8	317.5	330.3	325.0	374.4	363.6	378.0	376.0	395 4	371.0
Farm value (1967=100)	267.4	298.7	256.7	247.8	228.7	266.9	298 8	301.5	293.4	314.7	318.0
Farm-retail spread (1967=100)	314.3	347.4	346.1	369.2	370.3	425.0	394.1	414.0	414.8	433.3	395.9
Farm value/retail cost (%)	28.6	28.8	25 9	24.0	22.5	22.8	26.3	25.8	25.0	25.4	27.4
Processed fruits & vegetables											
Retail cost (1967=100)	288.8	306 1	3t4.1	308.1	308.6	313.0	317.8	317.0	319.0	320.2	321.0
Farm value (1967=100)	300.5	343.5	378.5	326.3	322.7	363.4	369.8	365.6	364.7	358.4	347.4
Farm-retail spread (1967=100)	286.2	297.8	299.9	305.3	305.5	301.8	306.5	306.5	308.9	313.3	315 2
Farm value/retail costs (%)	18.9	20.3	21.8	19.1	18.0	21.0	21.1	20.8	20.7	18.9	19.6
Fats & oils											
Retail cost (1967=100)	263.1	288.0	294.4	287.8	287.3	289 9	293.9	291.4	292.8	291.8	292 9
Farm value (1967=100)	251.0	324.8	271.3	199.1	196.8	189.0	192 5	188 1	198.3	188 5	188.8
Farm-retail spread (1967=100)	267.8	273.8	303.3	321 9	322.1	328.7	332.9	331.3	329.1	331.6	333.0
Farm value/retail cost (%)	26.5	31.3	25 6	18.4	18.0	18.1	18.2	17.9	18.8	17.9	17.9

	Annual			1986	1987					
	1983	1984	1985	1986	July	Feb	Mar	Apr	May	June	July
Beef, Choice											
Retail price 2/ (cts/lb)	238.1	239.6	232.6	230.7	227.4	233.6	233.6	236.8	243.4	249.4	248.2
Net carcass value 3/ (cts)	145.4	147.6	135.2	133.1	133.4	137.5	138.5	150.9	158.8	157.8	148.8
Net farm value 4/ (cts)	136.2	140.0	126.8	124.4	124.9	131.7	133.4	143.7	150.9	148.7	139.1
Farm-retail spread (cts)	101.8	99.6	105.8	106.3	102.5	101.9	100 2	93.1	92.5	100.7	109.1
Carcass-retail spread 5/ (cts)	92.7	92.0	97.4	97.6	94.0	96.1	94.1	85.8	83.5	91.8	99.4
Farm-carcass spread 6/ (cts)	9.2	7.6	8.4	8.7	8.5	5.8	6.1	7.2	9.0	8.9	9.7
Farm value/retail price (%)	57	58	55	54	55	56	57	61	62	60	56
Pork											
Retail price 2/ (cts/lb)	169.8	162.0	162.0	178.4	183.4	185.6	181.3	178.9	183.7	187.6	193.6
Wholesale value 3/ (cts)	108.9	110.1	101.1	110.9	127.4	103.8	102.2	108.4	117 0	124.3	126.2
Net farm value 4/ (cts)	76 5	77.4	71.4	82.4	97.8	77.8	76.8	82.7	89.3	98.2	98.8
Farm-retail spread (cts)	93.3	84.6	90.6	96.0	85.5	107.8	104.5	96.2	94.4	89.4	94.8
Wholesale-retail spread 5/ (cts)	60.9	51.8	60.8	67.5	56.0	81.8	79.1	70.5	66.7	63.3	67.4
Farm-wholesale spread 6/ (cts)	32.4	32.7	29.7	28.5	29.5	26.0	25.4	25.7	27.7	26.1	27.4
Farm value/retail price (%)	45	48	44	46	53	42	42	46	49	52	51

1/ Retail costs are based on indexes of retail prices for domestically produced farm foods from the CPI-U published monthly by the Bureau of Labor Statistics. The farm value is the payment to farmers for quantity of farm product equivalent to retail unit, less allowance for byproduct. Farm values are based on prices at first point of sale and may include marketing charges such as grading and packing for some commodities. The farm-retail spread, the difference between the retail price and the farm value, represents charges for assembling, processing, transporting, and distributing these foods. 2/ Estimated weighted average price of retail cuts from pork and choice yield grade 3 beef carcasses. Retail cut prices from BLS. 3/ Value of carcass quantity (beef) and wholesale cuts (pork) equivalent to 1 lb. of retail cuts; beef adjusted for value of fat and bone byproducts. 4/ Market value to producer for quantity of live animal equivalent to 1 lb. of retail cuts minus value of byproducts. 5/ Represents charges for retailing and other marketing services such as fabricating, wholesaling, and in-city transportation. 6/ Represents charges made for livestock marketing, processing, and transportation to city where consumed.

Note: annual historical data on farm-retail price spreads may be found in Food Consumption, Prices and Expenditures, Statistical Bulletin 736, ERS, USDA.

Information contacts: Denis Dunham (202) 786-1870; Ron Gustafson (202) 786-1830.

Table 9.—Price Indexes of Food Marketing Costs

(See the Sept. Issue)

Information contact: Denis Dunham (202) 786-1870

Livestock and Products

Table 10.—U.S. Meat Supply & Use

Item	Beg. stocks	Production 1/	Imports	Total supply	Exports	Shipments	Military consumption	Ending stocks	Civilian consumption: Total	Civilian consumption: Per capita 2/	Primary market price 3/
	Million pounds 4/									Pounds	
Beef:											
1984	325	23,598	1,823	25,746	329	47	112	358	24,900	78.5	65.34
1985	358	23,728	2,071	26,157	328	51	115	317	25,346	79.1	58.37
1986	317	24,371	2,129	26,817	521	52	110	311	25,823	79.8	57.75
1987 F	311	23,375	2,165	25,851	600	54	110	325	24,762	75.8	63-65
Pork:											
1984	301	14,812	854	16,067	164	147	86	274	15,396	61.8	48.86
1985	274	14,807	1,128	16,209	128	131	70	229	15,651	62.1	44.77
1986	229	14,063	1,122	15,414	86	132	73	187	14,927	58.6	51.19
1987 F	197	14,155	1,175	15,527	100	136	80	200	15,012	58.4	52-54
Veal:											
1984	9	495	24	528	6	1	4	14	503	1.8	60.24
1985	14	515	20	549	4	1	7	11	526	1.8	62.42
1986	11	524	27	562	5	1	6	7	843	1.9	60.89
1987 F	7	440	20	467	6	1	7	1	446	1.5	76.93
Lamb and mutton:											
1984	11	379	20	410	2	3	0	7	398	1.5	62.18
1985	7	358	36	401	1	2	0	13	385	1.4	68.61
1986	13	338	41	392	1	2	0	12	376	1.4	69.46
1987 F	12	314	45	371	2	2	0	8	359	1.3	79.09
Total red meat:											
1984	646	39,284	2,821	42,751	501	198	202	653	41,197	143.6	NA
1985	653	39,408	3,255	43,316	461	185	192	570	41,908	144.5	NA
1986	570	39,296	3,319	43,185	613	187	185	527	41,670	141.7	NA
1987 F	527	38,284	3,405	42,215	708	193	187	540	40,578	137.0	NA
Broilers:											
1984	21	13,016	0	13,038	407	145	34	20	12,432	52.8	55.6
1985	20	13,762	0	13,781	417	143	34	27	13,161	55.5	50.8
1986	27	14,316	0	14,342	566	149	35	24	13,568	56.7	56.9
1987 F	24	15,507	0	15,531	774	144	35	25	14,553	60.2	47-49
Mature chicken:											
1984	92	672	0	763	26	2	2	119	614	2.6	NA
1985	119	636	0	755	21	1	2	144	587	2.5	NA
1986	144	629	0	773	16	3	2	163	589	2.5	NA
1987 F	163	650	0	813	23	4	3	130	654	2.7	NA
Turkeys:											
1984	162	2,685	0	2,847	27	7	13	125	2,676	11.4	74.4
1985	125	2,942	0	3,067	27	7	13	150	2,870	12.1	75.5
1986	150	3,271	0	3,422	27	4	10	178	3,202	13.4	72.2
1987 F	178	3,828	0	4,006	30	3	16	300	3,658	15.1	56-58
Total poultry:											
1984	275	16,373	0	16,648	460	153	49	264	15,722	66.9	NA
1985	264	17,340	0	17,604	465	151	49	321	16,619	70.1	NA
1986	321	18,216	0	18,537	609	156	47	365	17,359	72.5	NA
1987 F	365	19,986	0	20,351	827	151	54	455	18,865	78.0	NA
Red meat & poultry:											
1984	921	55,657	2,821	59,399	961	351	251	917	56,919	210.5	NA
1985	917	56,748	3,285	60,920	926	336	241	891	58,526	214.6	NA
1986	891	57,512	3,219	61,722	1,222	342	236	892	59,029	214.3	NA
1987 F	892	58,270	3,405	62,566	1,535	342	251	995	59,442	215.1	NA

1/ Total including farm production for red meats and federally inspected plus non-federally inspected for poultry. 2/ Retail weight basis. 3/ Dollars per cut for red meat; cents per pound for poultry. Beef: choice steers, Omaha 900-1,100 lbs.; pork: barrows and gilts, 7 markets; veal: farm price of calves; lamb and mutton: choice slaughter lambs, San Angelo; broilers: wholesale 12-city average; turkeys: wholesale NY 8-16 lb. young hens. 4/ Carcass weight for red meats and certified ready-to-cook for poultry. NA = not available. F = forecast.

Information contact: Ron Gustafson, Leland Southard, or Mark Weimer (202) 786-1830.

Table 11.—U.S. Egg Supply & Use

	Beg. stocks	Production	Imports	Total supply	Exports	Shipments	Military use	Hatching use	Ending stocks	Civilian consumption: Total	Civilian consumption: Per capita	Wholesale price*
	Million dozen										No	Cts/doz
1982	17.5	5,801.9	2.5	5,821.8	158.2	26.7	22.4	505.6	20.3	5,088.6	265.1	70.1
1983	20.3	5,659.2	23.4	5,703.0	85.8	26.6	25.1	500.0	9.3	5,056.2	260.8	75.2
1984	9.3	5,708.2	32.0	5,749.5	58.2	27.8	17.6	529.7	11.1	5,105.1	260.9	80.9
1985	11.1	5,688.4	12.7	5,712.2	70.6	30.3	20.2	548.1	10.7	5,032.2	254.7	66.4
1986	10.7	5,715.0	13.7	5,739.4	101.6	28.0	17.5	565.9	10.4	5,016.1	251.5	71.1
1987 F	10.4	5,770.5	10.6	5,791.5	104.6	24.3	19.5	592.5	10.0	5,040.6	250.3	61-63

* Cartoned Grade A large eggs in New York. F = forecast.
Information contact: Mark Weimar (202) 786-1830.

Table 12.—U.S. Milk Supply & Use[1]

Calendar year	Production	Farm use	Commercial: Farm marketings	Commercial: Beg. stocks	Imports	Total commercial supply	CCC net removals	Commercial: Ending stocks	Commercial: Disappearance	All milk price 2/
	Billion pounds									$/cwt
1980	128.4	2.4	126.1	5.4	2.1	133.6	8.8	5.8	119.0	13.05
1981	132.8	2.3	130.5	5.8	2.3	138.5	12.9	5.4	120.3	13.77
1982	135.5	2.4	133.1	5.4	2.5	141.0	14.3	4.6	122.1	13.61
1983	139.7	2.4	137.3	4.6	2.6	144.5	16.8	5.2	122.5	13.58
1984	135.4	2.9	132.5	5.2	2.7	140.5	8.6	4.9	126.9	13.46
1985	143.1	2.5	140.7	4.9	2.8	148.4	13.2	4.6	130.6	12.75
1986 P	144.1	2.6	141.5	4.6	2.7	149.1	10.6	4.2	134.0	12.51
1987 F	142.0	2.6	139.4	4.2	2.7	146.3	5.0	4.4	136.9	12.60

1/ Milkfat basis. Totals may not add because of rounding. 2/ Delivered to plants and dealers; does not reflect deductions. P = preliminary. F = forecast.

Information contact: Jim Miller (202) 786-1830.

Table 13.—Poultry & Eggs

	Annual: 1984	Annual: 1985	Annual: 1986	1986: July	1987: Feb	1987: Mar	1987: Apr	1987: May	1987: June	1987: July
Broilers										
Federally inspected slaughter, certified (mil lb)	12,998.6	13,569.2	14,265.6	1,187.5	1,157.8	1,277.1	1,259.8	1,254.7	1,351.3	1,281.1
Wholesale price, 12-city, (cts/lb)	55.6	50.8	56.9	69.1	49.8	48.5	48.6	50.5	45.3	46.8
Price of grower feed ($/ton)	233	197	NA	190	172	176	185	182	184	194
Broiler-feed price ratio 1/	2.8	3.1	NA	4.5	3.5	3.3	3.2	3.3	3.0	2.9
Stocks beginning of period (mil lb)	21.2	19.7	26.6	23.3	27.2	23.1	25.5	26.9	26.9	24.2
Broiler-type chicks hatched (mil) 2/	4,593.9	4,803.8	5,013.3	429.8	406.1	457.2	454.3	471.2	458.3	458.9
Turkeys										
Federally inspected slaughter, certified (mil lb)	2,574	2,800	3,133	307.6	211.9	241.0	256.8	274.0	333.2	336.1
Wholesale price, Eastern U.S., 8-16 lb. young hens (cts/lb)	74.4	75.5	72.2	72.8	58.5	60.3	58.3	55.3	55.7	56.0
Price of turkey grower feed ($/ton)	245	212	NA	221	208	209	209	212	209	217
Turkey-feed price ratio 1/	3.8	4.4	NA	4.5	3.4	3.6	3.5	3.3	3.3	3.1
Stocks beginning of period (mil lb)	161.8	125.3	150.2	297.8	198.3	211.4	226.6	250.9	301.4	381.1
Poults placed in U.S. (mil)	190.0	197.8	225.4	22.3	22.6	25.2	26.1	26.6	27.0	26.0
Eggs										
Farm production (mil)	68,488	68,261	68,579	5,699	5,350	6,040	5,800	5,830	5,570	5,740
Average number of layers (mil) 3/	278	277	278	227	236	236	233	231	229	229
Rate of lay (eggs per layer on farms)	245	247	247	20.6	18.9	21.4	20.8	21.1	20.3	20.8
Cartoned price, New York, grade A large (cts/doz) 4/	80.8	66.4	71.1	73.0	65.2	62.0	62.4	55.6	58.7	59.1
Price of laying feed ($/ton)	206	182	NA	171	164	165	166	167	167	177
Egg-feed price ratio 1/	6.8	6.3	NA	6.9	7.1	6.6	6.7	6.0	6.1	5.8
Stocks, first of month										
Shell (mil doz)	.39	.93	.72	1.14	.60	.75	.96	.84	1.14	.96
Frozen (mil doz)	8.9	10.2	10.0	10.7	10.9	10.2	11.0	11.1	13.2	12.9
Replacement chicks hatched (mil)	459	407	425	33.6	35.2	42.3	42.1	41.4	38.0	33.5

1/ Pounds of feed equal in value to 1 dozen eggs or 1 lb. of broiler or turkey liveweight. 2/ Placement of broiler chicks are currently reported for 12 states only; henceforth, hatch of broiler-type chicks will be used as a substitute. 3/ Monthly data only available for 20 states. 4/ Price of cartoned eggs to volume buyers for delivery to retailers. NA = not available.

Information contact: Mark Weimar (202) 786-1830.

Table 14.—Dairy

	Annual			1986	1987					
	1984	1985	1986	July	Feb	Mar	Apr	May	June	July
Milk prices, Minnesota-Wisconsin, 3.5% fat ($/cwt) 1/	12.29	11.48	11.30	11.06	11.27	11.03	11.00	11.00	11.07	11.17
Wholesale prices										
Butter, Grade A Chi. (cts/lb)	148.8	141.1	144.5	143.7	136.7	137.8	138.8	138.4	144.6	149.0
Am. Cheese, Wis. assembly pt. (cts/lb)	138.0	127.7	127.3	126.7	122.5	122.2	122.4	122.0	122.0	123.2
Nonfat dry milk, (cts/lb) 2/	90.9	84.0	90.6	80.4	79.0	78.9	79.0	79.1	79.2	79.2
USDA net removals										
Total milk equiv. (mil lb) 3/	8,637.0	13,174.1	10,628.1	585.0	862.8	646.5	598.8	519.4	384.5	157.8
Butter (mil lb)	202.3	334.2	287.6	3.3	31.1	16.9	13.6	14.0	4.0	-.2
Am. cheese (mil lb)	447.3	629.0	468.4	51.8	21.8	29.9	32.0	23.2	30.1	15.7
Nonfat dry milk (mil lb)	678.4	940.6	827.3	80.6	41.2	57.7	61.0	58.8	67.2	53.2
Milk										
Milk prod. 21 states (mil lb)	114,545	121,043	122,185	10,468	9,279	10,376	10,378	10,957	10,491	10,433
Milk per cow (lb)	12,691	13,160	13,445	1,159	1,052	1,180	1,182	1,249	1,196	1,188
Number of milk cows (thou)	9,026	9,198	9,088	9,032	8,818	8,792	8,780	8,772	8,771	8,785
U.S. milk production (mil lb)	135,450	143,147	144,080	6/12,319	6/10,933	6/12,261	6/12,218	6/12,841	6/12,282	6/12,243
Stock, beginning										
Total (mil lb)	22,646	16,704	13,695	17,814	12,939	13,071	13,319	13,101	13,310	12,724
Commercial (mil lb)	5,234	4,937	4,590	5,281	4,480	4,363	4,446	4,813	5,161	5,661
Government (mil lb)	17,412	11,767	9,105	12,533	8,459	8,709	8,873	8,288	8,148	7,063
Imports, total (mil lb) 3/	2,741	2,777	2,733	214	151	195	167	145	160	NA
Commercial disappearance milk equiv. (mil lb)	126,912	130,640	134,049	11,728	10,141	11,512	11,209	11,902	11,347	NA
Butter										
Production (mil lb)	1,103.3	1,247.8	1,202.4	79.7	97.8	107.6	104.2	101.7	83.1	NA
Stocks, beginning (mil lb)	499.4	296.5	205.5	342.8	202.6	231.6	254.0	247.9	250.2	237.9
Commercial disappearance (mil lb)	902.7	818.2	922.9	78.8	72.1	81.5	86.3	79.3	63.2	NA
American cheese										
Production (mil lb)	2,648.5	2,855.2	2,798.2	242.1	211.2	238.7	246.0	264.3	246.1	240.6
Stocks, beginning (mil lb)	1,161.5	960.5	850.2	921.0	674.2	635.3	614.8	603.5	624.4	603.0
Commercial disappearance (mil lb)	2,253.6	2,279.1	2,382.8	189.1	189.4	200.4	190.1	228.8	202.0	NA
Other cheese										
Production (mil lb)	2,025.5	2,225.7	2,411.0	194.5	189.7	217.2	212.4	220.4	217.7	220.5
Stocks, beginning (mil lb)	104.9	101.4	94.1	98.4	93.5	88.1	89.4	91.8	97.1	94.4
Commercial disappearance (mil lb)	2,310.9	2,515.7	2,684.9	215.1	209.9	237.1	225.4	231.2	238.1	NA
Nonfat dry milk										
Production (mil lb)	1,160.7	1,390.0	1,284.1	110.9	80.3	87.8	101.4	118.6	104.8	98.6
Stocks, beginning (mil lb)	1,405.2	1,247.6	1,011.1	1,011.8	596.6	559.7	512.9	460.8	485.5	429.7
Commercial disappearance (mil lb)	497.8	435.0	479.1	48.6	28.4	36.2	35.8	38.3	41.3	NA
Frozen dessert										
Production (mil gal) 4/	1,241.8	1,251.0	1,248.6	133.0	90.0	107.5	113.0	118.8	134.6	135.9

	Annual			1985	1986				1987	
	1984	1985	1986	IV	I	II	III	IV	I	II P
Milk production (mil lb)	135,450	143,147	144,080	35,424	36,172	38,350	35,610	33,947	34,877	37,341
Milk per cow (lb)	12,506	12,994	13,293	13,174	3,251	3,505	3,327	3,208	3,328	3,583
No. of milk cows (thou)	10,833	11,016	10,839	11,162	11,126	10,943	10,703	10,583	10,481	10,422
Milk-feed price ratio 5/	1.59	1.72	1.73	1.76	1.73	1.64	1.72	1.91	1.88	1.76
Returns over concentrate costs ($/cwt milk) 5/	9.52	9.54	9.23	9.61	8.40	8.55	8.97	10.10	9.82	8.99

1/ Manufacturing grade milk. 2/ Prices paid f.o.b. Central States production area, high heat spray process. 3/ Milk-equivalent, fat-basis. 4/ Ice cream, ice milk, and hard sherbet. 5/ Based on average milk price after adjustment for price-support deductions. 6/ Estimated. P = preliminary. NA = not available.

Information contact: Jim Miller (202) 786-1830.

Table 15.—Wool

	Annual			1986	1987					
	1984	1985	1986	July	Feb	Mar	Apr	May	June	July
U.S. wool price, Boston 1/ (cts/lb)	229	192	191	193	202	216	260	270	270	270
Imported wool price, Boston 2/ (cts/lb)	241	197	201	NA	212	234	248	250	250	243
U.S. mill consumption, scoured										
Apparel wool (thou lb)	128,982	106,051	126,768	11,287	11,736	14,426	11,608	11,328	13,558	9,654
Carpet wool (thou lb)	13,088	10,562	9,960	827	811	1,308	1,209	1,190	934	1,190

1/ Wool price delivered at U.S. mills, clean basis, Graded Territory 64's (20.60-22.04 microns) staple 2-3/4'' and up. 2/ Wool price delivered at U.S. mills, clean basis, Australian 60/62's, type 64A (24 micron). Duty since 1982 has been 10.0 cents.

Information contact: John Lawler (202) 786-1840.

Table 16.—Meat Animals

	Annual			1986	1987					
	1984	1985	1986	July	Feb	Mar	Apr	May	June	July
Cattle on feed (7-States)										
Number on feed (thou head) 1/	8,006	8,635	7,920	6,543	7,294	7,143	7,222	7,233	7,520	7,193
Placed on feed (thou head)	20,772	19,346	20,005	1,544	1,427	1,754	1,726	1,954	1,462	1,264
Marketings (thou head)	18,785	18,989	19,243	1,682	1,473	1,586	1,581	1,524	1,702	1,694
Other disappearance (thou head)	1,376	1,132	1,049	64	105	89	134	143	87	74
Beef steer-corn price ratio, Omaha 2/	21.6	23.3	31.0	29.0	44.0	41.6	42.3	40.1	38.8	41.0
Hog-corn price ratio, Omaha 2/	16.1	17.8	27.8	30.3	35.1	32.6	32.7	31.6	34.3	38.4
Market prices ($ per cwt)										
Slaughter cattle:										
Choice steers, Omaha	65.34	58.37	57.75	58.27	61.02	61.58	66.30	70.66	68.83	65.80
Utility cows, Omaha	39.81	38.32	37.19	33.32	42.29	45.01	44.23	44.36	44.72	45.64
Choice vealers, S. St. Paul	63.95	58.28	59.92	62.13	68.28	70.00	75.00	90.00	90.63	77.50
Feeder cattle:										
Choice, Kansas City, 600-700 lb.	65.28	64.56	62.79	61.00	71.38	71.13	72.90	73.38	74.00	76.20
Slaughter hogs:										
Barrows & gilts, 7-markets	48.86	44.77	51.19	60.99	48.73	48.22	51.85	55.58	61.08	61.85
Feeder pigs:										
S. Mo. 40-50 lb. (per head)	39.12	37.20	45.62	50.76	53.96	54.98	56.00	51.66	45.89	45.60
Slaughter sheep & lambs:										
Lambs, Choice, San Angelo	62.18	68.61	69.46	73.84	75.75	86.50	93.12	94.50	84.83	76.83
Ewes, Good, San Angelo	20.90	34.02	34.78	35.31	41.25	42.50	39.05	36.25	34.62	36.62
Feeder lambs:										
Choice, San Angelo	61.02	85.91	73.14	79.97	99.50	108.50	109.40	112.62	94.56	98.75
Wholesale meat prices, Midwest										
Choice steer beef, 600-700 lb	98.01	90.76	88.98	89.25	91.69	92.86	100.56	107.80	105.71	99.29
Canner & Cutter cow beef	74.70	74.13	71.31	73.33	80.89	84.58	82.19	82.05	84.15	84.51
Pork loins, 8-14 lb. 3/	96.36	91.51	104.78	121.77	99.40	93.25	102.21	120.77	124.38	121.73
Pork bellies, 12-14 lb.	60.08	59.50	65.82	90.08	57.81	60.02	65.79	67.21	78.44	83.62
Hams, skinned, 14-17 lb.	78.22	67.50	80.01	85.57	65.43	71.97	72.66	70.98	78.91	79.93
Commercial slaughter (thou head)*										
Cattle	37,582	36,293	37,288	3,322	2,662	2,904	2,971	2,872	3,034	3,098
Steers	17,474	16,912	17,516	1,555	1,284	1,413	1,523	1,438	1,527	1,562
Heifers	10,691	11,237	11,097	1,004	824	892	855	852	901	915
Cows	8,617	7,391	7,960	698	502	541	534	522	547	561
Bulls & stags	789	758	715	65	51	58	59	60	60	60
Calves	3,297	3,385	3,408	300	239	266	228	202	227	232
Sheep & lambs	6,759	6,165	5,635	449	400	442	496	373	421	426
Hogs	85,168	84,492	79,598	6,098	6,055	6,966	6,665	6,078	6,158	6,187
Commercial production (mil lb)										
Beef	23,418	23,557	24,213	2,147	1,747	1,907	1,928	1,851	1,958	2,017
Veal	479	499	509	45	36	38	34	32	35	34
Lamb & mutton	371	352	331	26	24	27	29	22	24	25
Pork	14,720	14,728	13,988	1,063	1,070	1,226	1,169	1,070	1,086	1,082

	Annual			1986				1987		
	1984	1985	1986	I	II	III	IV	I	II	III
Cattle on feed (13-States)										
Number on feed (thou head) 1/	9,908	10,653	9,754	9,754	8,945	7,970	8,197	9,235	8,797	8,666
Placed on feed (thou head)	24,917	23,366	23,553	5,270	5,221	6,336	6,726	5,700	5,961	---
Marketings (thou head)	22,540	22,887	22,836	5,763	5,821	5,876	5,376	5,767	5,669	5/6,118
Other disappearance (thou head)	1,632	1,398	1,236	316	375	233	312	371	423	---
Hogs & pigs (10-States) 4/										
Inventory (thou head) 1/	42,420	41,100	39,870	41,100	38,210	37,845	39,335	39,870	39,235	41,080
Breeding (thou head) 1/	5,348	5,258	5,155	5,258	4,948	4,840	4,840	5,155	5,230	5,330
Market (thou head) 1/	37,072	35,842	34,715	35,842	33,262	33,005	34,495	34,715	34,005	35,750
Farrowings (thou head)	9,020	8,831	8,208	1,863	2,161	2,034	2,150	1,957	2,337	5/2,217
Pig crop (thou head)	67,680	67,648	63,714	14,254	16,878	15,853	16,729	15,156	18,485	---

1/ Beginning of period. 2/ Bushels of corn equal in value to 100 pounds live-weight. 3/ Beginning January 1984 prices are for 14-17 lbs.; January 1986 prices are for 14-18 lbs. 4/ Quarters are Dec. of preceding year-Feb. (I), Mar.-May (II), June-Aug. (III), and Sept.-Nov. (IV). 5/ Intentions. *Classes estimated

Information contact: Ron Gustafson or Leland Southard (202) 786-1830.

Table 17.—Supply & Utilization[1,2]

	Area			Yield	Production	Total supply 4/	Feed and residual	Other domestic use	Exports	Total use	Ending stocks	Farm price 5/
	Set aside 3/	Planted	Harvested									
	Mil. acres			Bu/acre				Mil. bu				$/bu
Wheat												
1982/83	5.8	86.2	77.9	35.5	2,765	3,932	195	713	1,509	2,417	1,515	3.45
1983/84	30.0	76.4	61.4	39.4	2,420	3,939	369	742	1,429	2,540	1,399	3.51
1984/85	18.6	79.2	66.9	38.8	2,595	4,003	405	749	1,424	2,578	1,425	3.39
1985/86*	18.8	75.6	64.7	37.5	2,425	3,866	275	771	915	1,961	1,905	3.08
1986/87*	19.5	72.0	60.7	34.4	2,087	4,013	386	808	1,004	2,198	1,815	2.42
1987/88*	23.7	65.2	55.4	38.2	2,114	3,944	175	830	1,225	2,230	1,714	2.30-2.60
	Mil. acres			lb/acre				Mil. cwt (rough equiv.)				$/cwt
Rice												
1982/83	0.42	3.30	3.26	4,710	153.6	203.4	--	6/62.8	68.8	131.6	71.5	7.91
1983/84	1.74	2.19	2.17	4,598	99.7	171.8	--	6/54.7	70.3	125.0	46.8	8.57
1984/85	.79	2.83	2.80	4,954	138.8	187.3	--	6/60.5	62.1	122.6	64.7	8.04
1985/86*	1.24	2.51	2.49	5,414	134.9	201.8	--	6/65.8	58.7	124.5	77.3	6.53
1986/87*	1.26	2.40	2.38	5,648	134.4	214.1	--	6/79.0	80.0	159.0	55.1	3.80
1987/88*	1.38	2.34	2.32	5,471	126.8	188.3	--	6/80.5	82.0	162.5	22.8	4.20-5.00
	Mil. acres			Bu/acre				Mil. bu				$/bu
Corn												
1982/83	2.1	81.9	72.7	113.2	8,235	10,772	4,521	884	1,834	7,249	3,523	2.55
1983/84	32.2	60.2	51.5	81.1	4,175	7,700	3,818	875	1,901	6,694	1,006	3.21
1984/85	3.9	80.5	71.9	106.7	7,674	8,684	4,078	1,081	1,865	7,036	1,648	2.63
1985/86*	5.4	83.4	75.2	118.6	8,877	10,536	4,095	1,160	1,241	6,496	4,040	2.23
1986/87*	13.6	76.7	69.2	119.3	8,253	12,284	4,650	1,191	1,525	7,366	4,929	1.51
1987/88*	21.1	66.0	59.6	119.9	7,141	12,072	4,700	1,215	1,600	7,515	4,557	1.60-1.90
	Mil. acres			Bu/acre				Mil. bu				$/bu
Sorghum												
1982/83	0.7	16.0	14.1	59.1	835	1,154	495	10	210	715	439	2.47
1983/84	5.7	11.9	10.0	48.7	488	927	385	10	245	640	287	2.74
1984/85	.6	17.3	15.4	56.4	866	1,154	539	18	297	854	300	2.32
1985/86*	.9	18.3	16.8	66.8	1,120	1,420	664	28	178	869	551	1.93
1986/87*	2.3	15.3	13.9	67.7	942	1,493	525	15	200	740	753	1.40
1987/88*	3.9	11.8	10.5	72.0	757	1,510	525	30	225	780	730	1.50-1.75
	Mil. acres			Bu/acre				Mil. bu				$/bu
Barley												
1982/83	0.4	9.5	8.0	57.2	516	675	241	170	47	458	217	2.18
1983/84	1.1	10.4	9.7	52.3	509	733	282	170	92	544	189	2.47
1984/85	.5	12.0	11.2	53.4	599	799	304	170	77	551	247	2.29
1985/86*	.7	13.2	11.6	51.0	591	848	333	169	22	523	325	1.98
1986/87*	1.8	13.1	12.0	50.8	610	942	295	174	137	606	336	1.61
1987/88*	2.9	11.0	10.1	51.2	518	860	300	175	125	600	260	1.65-1.75
	Mil. acres			Bu/acre				Mil. bu				$/bu
Oats												
1982/83	0.1	14.0	10.3	57.8	593	749	441	85	3	529	220	1.49
1983/84	.3	20.3	9.1	52.6	477	727	466	78	2	546	181	1.62
1984/85	.1	12.4	8.2	58.0	474	689	433	74	1	509	180	1.67
1985/86*	.1	13.3	8.2	63.7	521	728	460	82	2	544	184	1.23
1986/87*	.4	14.7	6.8	56.0	385	602	393	73	3	469	133	1.21
1987/88	.9	16.0	7.3	53.9	393	561	365	80	2	447	114	1.25-1.65
	Mil. acres			Bu/acre				Mil. bu				$/bu
Soybeans												
1982/83	0	70.9	69.4	31.5	2,190	2,444	7/86	1,108	905	2,099	345	5.69
1983/84	0	63.8	62.5	26.2	1,636	1,981	7/79	983	743	1,805	176	7.83
1984/85	0	67.8	66.1	28.1	1,861	2,037	7/93	1,030	598	1,721	316	5.84
1985/86*	0	63.1	61.6	34.1	2,099	2,415	7/86	1,053	740	1,879	536	5.05
1986/87*	0	61.5	59.4	33.8	2,007	2,543	7/118	1,185	760	2,063	480	4.80
1987/88*	0	58.7	57.6	34.0	1,957	2,437	7/87	1,200	670	1,957	480	4.70-5.00
								Mil. lbs				8/ ¢/lb
Soybean oil												
1982/83	--	--	--	--	12,041	13,144	--	9,858	2,025	11,883	1,261	20.6
1983/84	--	--	--	--	10,872	12,133	--	9,58a	1,824	11,412	721	30.6
1984/85	--	--	--	--	11,468	12,209	--	9,917	1,660	11,577	632	29.5
1985/86*	--	--	--	--	11,617	12,257	--	10,053	1,257	11,310	947	18.0
1986/87*	--	--	--	--	12,853	13,800	--	10,750	1,100	11,850	1,950	15.3
1987/88*	--	--	--	--	13,000	14,950	--	11,150	1,400	12,550	2,400	12.0-16.0
								Thou. tons				9/ $/ton
Soybean meal												
1982/83	--	--	--	--	26,714	26,489	--	19,306	7,109	26,415	474	187
1983/84	--	--	--	--	22,756	23,230	--	17,619	5,060	22,875	255	188
1984/85	--	--	--	--	24,529	24,784	--	19,480	4,917	24,397	387	125
1985/86*	--	--	--	--	24,951	25,338	--	19,090	6,036	25,126	212	155
1986/87*	--	--	--	--	27,878	28,090	--	20,400	7,400	27,800	290	163
1987/88*	--	--	--	--	28,360	28,650	--	21,100	7,250	28,350	300	150-175

See footnotes at end of table.

Table 17.— Supply & Utilization, continued

	Area											
	Set aside 3/	Planted	Harvested	Yield	Production	Total supply 4/	Feed and residual	Other domestic use	Exports	Total use	Ending stocks	Farm price 5/
	Mil. acres			lb/acre	Mil. bales							¢/lb
Cotton 10/												
1982/83	1.6	11.3	9.7	590	12.0	18.6	--	5.5	5.2	10.7	7.9	59.5
1983/84	6.8	7.9	7.3	508	7.8	15.7	--	5.9	6.8	12.7	2.8	65.3
1984/85	2.5	11.1	10.4	600	13.0	15.8	--	5.5	6.2	11.8	4.1	58.7
1985/86*	3.6	10.7	10.2	630	13.4	17.5	--	6.4	2.0	8.4	9.4	56.5
1986/87*	3.3	10.0	8.5	552	9.7	19.1	--	7.4	6.7	14.1	5.0	52.2
1987/88*	3.1	10.4	10.0	616	12.8	17.9	--	7.5	7.0	14.5	3.5	--

*September 10, 1987 Supply and Demand Estimates. 1/ Marketing year beginning June 1 for wheat, barley, and oats, August 1 for cotton and rice, September 1 for soybeans, corn, and sorghum, October 1 for soymeal and soyoil. 2/ Conversion factors: Hectare (ha.) = 2.471 acres, 1 metric ton = 2204.622 pounds, 36.7437 bushels of wheat or soybeans, 39.3679 bushels of corn or sorghum, 45.9296 bushels of barley, 68.8944 bushels of oats, 22.046 cwt. of rice, and 4.99 480-pound bales of cotton. 3/ Includes diversion, PIK, and acreage reduction programs. 4/ Includes imports. 5/ Market average prices do not include an allowance for loans outstanding and Government purchases. 6/ Residual included in domestic use. 7/ Includes seed. 8/ Average of crude soybean oil, Decatur. 9/ Average of 44 percent, Decatur. 10/ Upland and extra long staple. Stock estimates based on Census Bureau data which results in an unaccounted difference between supply and use estimates and changes in ending stocks.

Information contact: Commodity Economics Division, Crops Branch (202) 786-1840.

Table 18.—Food Grains

	Marketing year 1/				1986	1987				
	1982/83	1983/84	1984/85	1985/86	July	Mar	Apr	May	June	July
Wholesale prices										
Wheat, No. 1 HRW, Kansas City ($/bu) 2/	3.94	3.84	3.74	3.28	2.50	2.90	2.90	3.02	2.70	2.59
Wheat, DNS, Minneapolis ($/bu) 2/	3.95	4.21	3.70	3.25	2.17	2.61	2.60	2.76	2.66	2.52
Rice, S.W. La. ($/cwt) 3/	18.00	19.38	17.98	16.11	12.42	9.93	10.38	10.38	10.50	10.50
Wheat										
Exports (mil bu)	1,509	1,429	1,424	915	111	74	73	72	126	NA
Mill grind (mil bu)	656	694	676	711	62	64	64	68	65	NA
Wheat flour production (mil cwt)	292	308	301	320	28	29	28	30	29	NA
Rice										
Exports (mil cwt, rough equiv)	68.9	70.3	62.1	58.7	8.6	5.4	6.4	7.2	4.9	4.2

	Marketing year 1/			1985	1986				1987	
	1983/84	1984/85	1985/86	Oct-Dec	Jan-Mar	Apr-May	Jun-Aug	Sept-Nov	Dec-Feb	Mar-May
Wheat										
Stocks, beginning (mil bu)	1,515	1,399	1,425	2,971.1	2,526.1	2,130.0	1,905.0	3,154.6	2,671.5	2,249.8
Domestic use:										
Food (mil bu)	643	651	683	176.8	166.9	110.7	174.1	192.2	177.2	180.2
Feed & seed (mil bu) 4/	459	502	363	24.9	4.9	1.8	346.8	31.1	47.6	44.8
Exports (mil bu)	1,429	1,424	915	247.3	226.1	115.3	320.6	263.4	202.7	216.8

1/ Beginning June 1 for wheat and August 1 for rice. 2/ Ordinary protein. 3/ Long-grain, milled basis. 4/ Feed use approximated by residual. NA = not available.

Information contacts: Allen Schienbein and Janet Livezey (202) 786-1840.

Table 19.—Cotton

	Marketing year 1/				1986	1987				
	1982/83	1983/84	1984/85	1985/86	July	Mar	Apr	May	June	July
U.S. price, SLM, 1-1/16 in. (cts/lb) 2/	63.1	73.1	60.5	60.0	65.7	54.6	57.7	65.9	70.4	73.1
Northern Europe prices:										
Index (cts/lb) 3/	76.7	87.6	69.2	48.9	37.4	63.0	66.2	76.6	79.3	83.2
U.S. M 1-3/32 (cts/lb) 4/	78.0	87.1	73.9	64.8	38.1	62.5	65.2	75.1	76.2	81.8
U.S. mill consumption (thou bales)	5,513	5,927	5,545	6,399	459	676	661	642	655	634
Exports (thou bales)	5,207	6,786	6,201	1,969	268	653	660	488	468	575
Stocks, beginning (thou bales)	6,632	7,937	2,775	4,102	4,739	11,094	9,765	8,444	7,315	6,192

1/ Beginning August 1. 2/ Average spot market. 3/ Liverpool Outlook A Index: average of five lowest priced of 10 selected growths. 4/ Memphis territory growths.

Information contact: Bob Skinner (202) 786-1840.

Table 20.—Feed Grains

	Marketing year 1/				1986	1987				
	1982/83	1983/84	1984/85	1985/86	July	Mar	Apr	May	June	July
Wholesale prices										
Corn, No. 2 yellow, Chicago ($/bu)	2.98	3.46	2.79	2.35	1.98	1.60	1.69	1.89	1.88	1.68
Sorghum, No. 2 yellow, Kansas City ($/cwt)	4.80	5.22	4.46	3.72	3.20	2.80	2.85	3.10	3.20	2.80
Barley, feed, Minneapolis ($/bu) 2/	1.76	2.48	2.09	1.53	1.16	1.64	1.76	1.86	1.73	1.59
Barley, malting, Minneapolis ($/bu)	2.53	2.84	2.55	2.24	1.75	2.01	2.05	2.12	2.07	1.93
Exports										
Corn (mil bu)	1,834	1,902	1,865	1,241	46	145	185	171	121	NA
Feed grains (mil metric tons) 3/	53.0	56.5	56.6	36.6	1.64	4.7	5.4	4.9	3.4	NA

	Marketing year 1/				1986				1987	
	1982/83	1983/84	1984/85	1985/86	Dec-Feb	Mar-May	June-Aug	Sept-Nov	Dec-Feb	Mar-May
Corn										
Stocks, beginning (mil bu)	2,537	3,523	1,006	1,648	8,615	6,587	4,990	4,040	10,304	8,248
Domestic use:										
Feed (mil bu)	4,521	3,818	4,079	4,095	1,300	1,086	494	1,368	1,472	1,089
Food, seed, ind. (mil bu)	895	975	1,091	1,160	264	309	308	280	270	325
Exports (mil bu)	1,834	1,902	1,865	1,241	465	204	154	321	315	502
Total use (mil bu)	7,249	6,694	7,036	6,496	2,029	1,599	956	1,989	2,058	1,917

1/ September 1 for corn and sorghum; June 1 for oats and barley. 2/ Beginning March 1987 reporting point changed from Minneapolis to Duluth. 3/ Aggregated data for corn, sorghum, oats, and barley.
NA = not available.

Information contacts: Larry Van Meir (202) 786-1840.

Table 21.—Fats & Oils

	Marketing year 1/				1986	1987				
	1982/83	1983/84	1984/85	1985/86	June	Feb	Mar	Apr	May	June
Soybeans										
Wholesale price, No. 1 yellow, Chicago ($/bu) 2/	6.11	7.78	5.88	5.20	5.33	4.84	4.86	5.10	5.46	5.56
Crushings (mil bu)	1,107.8	982.7	1,030.5	1,052.8	79.6	102.3	106.0	95.9	95.3	90.6
Exports (mil bu)	905.2	742.8	598.2	740.0	28.7	73.8	67.8	53.9	37.6	99.2
Stocks, beginning (mil bu)	254.5	344.6	175.7	316.0	53.2	113.1	105.4	90.2	85.2	72.9
Soybean oil										
Wholesale price, crude, Decatur (cts/lb)	20.62	30.55	29.52	18.0	16.80	15.40	15.21	15.31	16.22	15.96
Production (mil lb)	12,040.4	10,872.0	11,467.9	11,620.4	881.9	1,109.6	1,149.0	1,047.1	1,037.6	981.1
Domestic disap. (mil lb)	9,857.3	9,598.6	9,916.7	10,062.8	970.3	856.0	761.6	1,027.1	918.2	970.3
Exports (mil lb)	2,024.7	1,813.6	1,659.8	1,257.2	115.1	74.0	52.1	28.2	47.4	85.0
Stocks, beginning (mil lb)	1,102.5	1,260.9	720.5	632.5	1,360.2	1,837.3	2,017.0	2,352.3	2,344.1	2,416.0
Soybean meal										
Wholesale price, 44% protein, Decatur ($/ton)	187.19	188.21	125.46	154.90	158.90	154.40	146.60	159.00	174.90	187.10
Production (thou ton)	26,713.6	22,756.2	24,529.3	24,957.8	1,879.4	2,409.9	2,489.1	2,256.4	2,245.6	2,134.6
Domestic disap. (thou ton)	19,306.0	17,615.2	19,481.7	19,122.3	1,430.2	1,513.5	1,538.4	1,593.4	1,740.1	1,738.1
Exports (thou ton)	7,108.7	5,359.7	4,916.5	6,007.0	452.9	930.1	992.4	654.8	427.8	455.8
Stocks, beginning (thou ton)	175.2	474.1	255.4	387.0	282.4	311.2	277.5	235.8	244.0	321.7
Margarine, wholesale price, Chicago, white (cts/lb)	41.1	46.3	55.4	42.1	40.40	39.75	39.20	39.38	40.13	39.50

1/ Beginning September 1 for soybeans; October 1 for soymeal and oil; calendar year for margarine. 2/ Beginning April 1, 1982, prices based on 30-day delivery, using upper end of the range.

Information contacts: Roger Hoskin (202) 786-1840; Tom Bickerton (202) 786-1691.

Table 22.—Farm Programs, Price Supports, Participation & Payment Rates

	Target price	Loan rate	Findley loan rate	Payment rates: Deficiency	Paid land diversion	PIK	Base acres	Program 1/	Participation rate 2/
	$/bu.					Percent 3/	Mil. acres		Percent of base
Wheat									
1982/83	4.05	3.55		.50			80.7	15/0/0	48
1983/84	4.30	3.65		.65	2.70	95	80.8	15/5/10-30	78/78/51
1984/85	4.38	3.30		1.00	2.70	85	84.0	20/10/10-20	60/60/20
1985/86	4.38	3.30		1.08	2.70		84.0	20/10/0	73
1986/87 4/	4.38	3.00	2.40	1.88	2.00	1.10	91.7	22.5/5 or 10/2.5	84/21/84
1987/88	4.38	2.85	2.28	2.10			89.6	27.5/0/0	83
	$/cwt								
Rice									
1982/83	10.85	8.14		2.71			3.97	15/0/0	78
1983/84	11.40	8.14		2.77	2.70	80	3.95	15/5/10-30	98/98/87
1984/85	11.80	8.00		3.76			4.16	25/0/0	85
1985/86	11.90	8.00	5/3.40	3.90	3.50		4.23	20/15/0	89
1986/87 4/	11.90	7.20	5/3.45	4.70			4.20	35/0/0	92
1987/88	11.66	6.84	5/3.50	4.82			4.22	35/0/0	93
	$/bu.								
Corn									
1982/83	2.70	6/2.55		.15			81.2	10/0/0	28
1983/84	2.86	2.65		0	1.50	80	82.6	10/10/10-30	71/71/60
1984/85	3.03	2.55		.43			80.8	10/0/0	54
1985/86	3.03	2.55		.48			84.2	10/0/0	69
1986/87 4/	3.03	2.40	1.92	1.11	.73		81.9	17.5/2.5/0	85
1987/88	3.03	2.28	1.82	1.21	2.00		83.3	20/15/0	88/55
	$/bu.								
Sorghum									
1982/83	2.60	2.42		.18			17.7	7/[same]	47
1983/84	2.72	2.52		0	1.50	80	18.0		72/72/53
1984/85	2.88	2.42		.46			18.2		42
1985/86	2.88	2.42		.46			19.3		55
1986/87 4/	2.88	2.28	1.82	1.06	.65		18.7		75
1987/88	2.88	2.18	1.74	1.14	1.90		18.1		83/42
	$/bu.								
Barley									
1982/83	2.60	2.08		.40			10.5	7/[same]	46
1983/84	2.60	2.16		.21	1.00		11.0		55/55/0
1984/85	2.60	2.08		.26			11.6		44
1985/86	2.60	2.08		.52			13.3		57
1986/87 4/	2.60	1.95	1.56	1.04	.57		12.4		73
1987/88	2.60	1.86	1.49	1.11	1.60		12.9		82/23
	$/bu.								
Oats									
1982/83	1.50	1.31		0			10.4	7/[same]	14
1983/84	1.60	1.36		.11	.75		9.8		20/20/0
1984/85	1.60	1.31		0			9.8		14
1985/86	1.60	1.31		.29			9.4		14
1986/87 4/	1.60	1.24	.99	.50	.36		9.5		37
1987/88	1.60	1.18	.94	.55	.80		8.7		44/15
	$/bu.								
Soybeans 8/									
1982/83		5.02							
1983/84		5.02							
1984/85		5.02							
1985/86		5.02							
1986/87 4/		5.02	4.77						
1987/88		5.02	4.77						
	¢/lb.								
Upland cotton									
1982/83	71.0	57.10		13.92			15.3	15/0/0	78
1983/84	76.0	55.00		12.10	25.00	85	15.4	20/5/10-30	93/93/77
1984/85	81.0	55.00		18.60			15.6	25/0/0	70
1985/86	81.0	57.30		23.70	30.00		15.8	20/10/0	82/0/0
1986/87 4/	81.0	55.00	9/44.00	26.00			15.6	25/0/0	91
1987/88	79.40	52.25	10/	27.15			15.0	25/0/0	83

1/ Percentage of base acres farmers participating in Acreage Reduction Programs/Paid Land Diversion/PIK were required to devote to conserving uses to receive program benefits. In addition to the percentages shown for 1983/84, farmers had the option of submitting bids to retire their entire base acreages. 2/ Percentage of base acres enrolled in Acreage Reduction Programs/Paid Land Diversion/PIK. 3/ Percent of program yield, except 1986/87 wheat, which is dollars per bushel. 1983 and 1984 PIK rates apply only to the 10-30 and 10-20 portions, respectively. 4/ Payment rates for payments received in cash were reduced by 4.3 percent in 1986/87 due to Gramm-Rudman-Hollings. 5/ Annual average world market price. 6/ The Reserve loan rate was $2.80. 7/ The sorghum, barley, and oat programs were the same as for corn each year except 1983/84, when PIK was not offered on barley and oats. 8/ There are no target prices, acreage programs, or payment rates for soybeans. 9/ Loan repayment rate. 10/ Loans may be repaid at the lower of the loan rate or world market prices.

Information contact: Larry Van Meir (202) 786-1840.

Table 23.—Fruit

	Calendar years											
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986 P
Citrus												
Production (thou ton)	14,586	14,788	15,242	14,255	13,329	16,484	15,105	12,057	13,608	10,792	10,488 5/	11,889
Per capita consumption (lbs) 1/	119.3	117.2	124.5	107.4	108.5	112.7	104.7	109.6	120.2	102.8	115.7	109.8
Non citrus												
Production (thou tons)	12,384	11,846	12,274	12,460	13,689	15,152	12,961	14,217	14,154	14,292	14,188	13,861
Per capita consumption (lbs) 1/	85.8	84.2	84.3	82.5	85.8	87.3	88.1	89.0	89.0	93.7	92.6	95.3

	1986					1987						
	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July
Fob shipping point prices												
Apples ($/carton) 2/	NA	17.03	13.70	13.63	14.00	10.67	14.00	14.50	15.35	16.63	17.60	14.34
Pears ($/box) 3/	14.67	14.00	15.00	15.10	14.50	16.00	15.63	14.75	14.10	15.28	21.00	NA
Oranges ($/box) 4/	4.03	4.34	4.47	6.58	4.24	4.24	4.75	4.79	4.94	4.36	6.22	4.17
Grapefruit ($/box) 4/	6.76	6.63	6.29	4.19	4.54	4.50	4.55	4.76	5.21	5.26	5.08	4.14
Stocks, ending												
Fresh apples (mil lbs)	7.9	2,349.5	4,142.7	3,532.2	2,891.7	2,307.2	1,720.2	1,174.0	751.9	386.3	203.8	74.9
Fresh pears (mil lbs)	124.4	325.1	333.2	281.2	214.7	170.9	127.1	92.1	53.7	21.1	1.7	11.8
Frozen fruits (mil lbs)	741.1	740.7	855.6	777.5	720.9	632.3	563.0	497.7	495.6	510.6	625.9	877.4
Frozen orange juice (mil lbs)	855.3	715.4	577.6	524.8	621.2	877.8	1,015.7	937.1	894.8	1,112.6	1,108.6	945.8

1/ Revised per capita consumption for total U.S. population, including military consumption of both fresh and processed fruit in fresh weight equivalent. 2/ Red Delicious, Washington, extra fancy, carton tray pack, 80-113's. 3/ D'Anjou, Washington, standard box wrapped, U.S. No. 1, 90-135's. 4/ U.S. equivalent on-tree returns 5/ as of September 1, 1987. NA = not available. P = preliminary.

Information contact: Ben Huang (202) 786-1767.

Table 24.—Vegetables

	Calendar years									
	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Production										
Total vegetables (1,000 cwt) 1/	402,936	382,165	413,925	381,370	379,123	431,515	403,320	457,392	453,769	445,436
Fresh (1,000 cwt) 1/ 2/	176,541	182,563	190,859	190,228	194,694	207,924	197,919	217,132	217,832	216,267
Processed (tons) 3/	11,319,750	9,980,400	11,153,300	9,557,100	9,221,460	11,179,590	10,270,050	12,013,020	11,783,240	11,616,560
Mushrooms (1,000 lbs)	398,703	454,007	470,069	469,576	517,146	490,826	561,531	595,681	587,956	NA
Potatoes (1,000 cwt)	355,334	366,314	342,447	302,857	338,591	355,131	333,911	362,612	407,109	354,468
Sweetpotatoes (1,000 cwt)	11,885	13,115	13,370	10,953	12,799	14,833	12,083	12,986	14,853	12,674
Dry edible beans (1,000 cwt)	16,555	18,935	20,552	26,729	32,751	25,563	15,520	21,070	22,175	22,898

	1986						1987						
	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July
Shipments													
Fresh (1,000 cwt) 4/	27,818	17,579	15,174	19,275	15,967	15,766	20,607	18,066	22,286	20,011	23,887	35,745	23,754
Potatoes (1,000 cwt)	7,757	8,066	7,907	11,332	9,928	10,836	14,569	10,881	15,668	13,560	12,165	12,622	7,520
Sweetpotatoes (1,000 cwt)	160	96	246	428	706	389	279	259	293	299	177	98	21

1/ 1983 data are not comparable with 1984 and 1985. 2/ Estimate reinstated for asparagus with the 1984 crop, all other years also include broccoli, carrots, cauliflower, celery, sweet corn, lettuce, honeydews, onions, and tomatoes. 3/ Estimates reinstated for cucumbers with the 1984 crop, all other years also include snap beans, sweet corn, green peas, and tomatoes. 4/ Includes snap beans, broccoli, cabbage, carrots, cauliflower, celery, sweet corn, cucumbers, eggplant, lettuce, onions, bell peppers, squash, tomatoes, cantaloupes, honeydews, and watermelons. NA = not available

Information contact: Shannon Hamm or Cathy Greene (202) 786-1767.

Table 25.—Other Commodities

	Annual					1986			1987	
	1982	1983	1984	1985	1986 F	Apr-June	July-Sept	Oct-Dec	Jan-Mar	Apr-June
Sugar										
Production 1/	5,936	5,682	5,890	5,969	6,257	728	685	3,231	2,024	766
Deliveries 1/	9,153	8,812	8,454	8,035	7,810	1,907	2,069	1,991	1,908	2,002
Stocks, ending 1/	3,068	2,570	3,005	3,126	3,227	2,540	1,652	3,227	3,497	2,476
Coffee										
Composite green price N.Y. (cts/lb)	132.00	131.51	142.95	137.46	185.18	190.79	174.92	159.69	115.38	105.91
Imports, green bean equiv. (million lbs) 2/	2,352	2,259	2,411	2,550	2,596	653	635	498	563	790

	Annual			1986		1987				
	1984	1985	1986	May	Dec	Jan	Feb	Mar	Apr	May
Tobacco										
Prices at auctions 3/										
Flue-cured (dol/lb)	1.81	1.72	1.52	NQ	NQ	NQ	NQ	NQ	NQ	NQ
Burley (dol/lb)	1.88	1.59	1.57	NQ	1.57	1.52	1.57	NQ	NQ	NQ
Domestic consumption 4/										
Cigarettes (bil)	600.4	594.0	584.0	52.4	48.8	38.1	42.7	53.0	42.2	51.0
Large cigars (mil)	3,493	3,226	3,090	279.4	261.6	223.4	213.4	235.5	212.7	233.1

1/ 1,000 short tons, raw value. Quarterly data shown at end of each quarter. 2/ Green and processed coffee. 3/ Crop year July-June for flue-cured, October-September for burley. 4/ Taxable removals. F = forecast. NQ = no quote.

Information contacts: (sugar) Dave Harvey (202) 786-1769; (coffee) Fred Gray (202) 786-1769; (tobacco) Verner Grise (202) 786-1768.

Table 26.—World Supply & Utilization of Major Crops, Livestock, & Products

	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87 F	1987/88 F
				Million units			
Wheat							
Area (hectare)	238.7	237.7	229.1	231.4	229.3	228.0	221.3
Production (metric ton)	449.5	477.5	489.4	511.5	499.2	528.9	505.6
Exports (metric ton) 1/	101.3	98.7	102.0	107.0	84.6	89.8	94.4
Consumption (metric ton) 2/	443.6	462.2	482.2	495.6	487.6	519.7	516.8
Ending stocks (metric ton) 3/	87.0	102.3	109.5	125.4	137.0	146.2	134.9
Coarse Grains							
Area (hectare)	349.9	339.7	335.3	335.5	340.2	337.0	329.4
Production (metric ton)	766.0	784.4	687.0	813.7	845.8	835.4	803.6
Exports (metric ton) 1/	96.6	89.6	93.1	100.7	83.3	86.1	86.3
Consumption (metric ton) 2/	737.7	753.1	761.9	782.8	770.6	803.4	818.3
Ending stocks (metric ton) 3/	120.7	151.8	77.0	107.8	183.1	215.1	200.3
Rice, milled							
Area (hectare)	145.2	141.1	144.3	144.4	144.9	145.5	143.6
Production (metric ton)	280.6	285.7	308.0	319.2	320.0	315 6	304.9
Exports (metric ton) 4/	11.8	11.9	12.6	11.5	12.7	12.2	10.6
Consumption (metric ton) 2/	281.5	290.3	308.7	313.8	316.0	319.4	311.7
Ending stocks (metric ton) 3/	21.3	17.3	17.2	22.3	26.3	22.5	15.8
Total grains							
Area (hectare)	733.8	718.5	708.7	711.3	714.4	710.5	694.3
Production (metric ton)	1,496.1	1,547.6	1,484.4	1,644.4	1,665.0	1,679.9	1,614.1
Exports (metric ton) 1/	209.7	200.2	207.7	219.2	180.6	188.1	191.3
Consumption (metric ton) 2/	1,462.8	1,505.6	1,552.8	1,592.2	1,574.2	1,642.5	1,646.8
Ending stocks (metric ton) 3/	229.0	271.4	203.7	255.5	346.4	383.8	351.0
Oilseeds							
Crush (metric ton)	138 9	143.5	136.6	150.5	153.9	157.8	161.0
Production (metric ton)	169.4	178.2	165.9	191.1	196.0	196.4	202.2
Exports (metric ton)	35.9	35.2	33.0	33.0	34.4	37.9	36.0
Ending stocks (metric ton)	13.5	20.5	15.8	21.2	26.7	25.1	26.4
Meals							
Production (metric ton)	94.5	98.1	92.9	101.8	104.1	107.7	109.7
Exports (metric ton)	28.8	31.6	29.7	32.3	34.2	36.0	35.9
Oils							
Production (metric ton)	41.6	43.4	42.3	46.1	49.2	49.5	51.0
Exports (metric ton)	13.4	14.0	13.7	15.6	16.4	16.6	17.1
Cotton							
Area (hectare)	33.0	31.4	31.0	33.9	31.9	30.2	32.0
Production (bale)	71.2	68.1	67.7	88.1	79.3	69.3	77.5
Exports (bale)	20.2	19.4	19.2	20.5	20.5	25.4	24.0
Consumption (bale)	66.2	68 3	68.7	70.4	76.9	83.0	82.3
Ending stocks (bale)	25.2	25.1	25.1	42.7	45.9	31.4	26.3
	1981	1982	1983	1984	1985	1986 F	1987 F
Red meat							
Production (mil metric tons)	93.6	93.9	96.4	98.1	101.8	102.3	102.4
Consumption (mil metric tons)	92.0	92.2	94.7	96.1	98.6	100.9	100.9
Exports (mil metric tons) 1/	5.7	5.8	5.8	5.9	6.3	6.1	6.4
Poultry							
Production (mil metric tons)	22.5	23.1	23.5	24.2	25.2	26.0	27.4
Consumption (mil metric tons)	22.1	22.7	23.5	24.0	24.9	25.6	26.9
Exports (mil metric tons) 1/	1.5	1.4	1.3	1.2	1.2	1.2	1.3
Dairy							
Milk production (mil metric tons)	389.7	396.9	412.5	413.0	417.9	422.8	423.4

1/ Excludes intra-EC trade. 2/ Where stocks data not available (excluding USSR), consumption includes stock changes. 3/ Stocks data are based on differing marketing years and do not represent levels at a given date. Data not available for all countries; includes estimated change in USSR grain stocks but not absolute level. 4/ Calendar year date. 1982 data correspond with 1981/82, etc. F = forecast.

Information Contact: Frederic Surls (202) 786-1693.

Table 27.—Prices of Principal U.S. Agricultural Trade Products

	Annual			1986	1987					
	1984	1985	1986	July	Feb	Mar	Apr	May	June	July
Export commodities										
Wheat, f.o.b. vessel, Gulf ports ($/bu)	4.17	3.73	3.19	2.80	3.09	3.17	3.13	3.28	2.99	2.89
Corn, f.o.b. vessel, Gulf ports ($/bu)	3.50	2.89	2.27	2.17	1.74	1.85	1.93	2.08	2.08	1.97
Grain sorghum, f.o.b. vessel, Gulf ports ($/bu)	3.00	2.64	2.16	1.94	1.75	1.87	1.86	2.01	2.01	1.90
Soybeans, f.o.b. vessel, Gulf ports ($/bu)	7.38	5.83	5.45	5.45	5.08	5.14	5.35	5.71	5.82	5.74
Soybean oil, Decatur (cts/lb)	30.75	27.03	16.36	16.21	15.21	15.03	15.03	15.93	15.57	15.05
Soybean meal, Decatur ($/ton)	166.80	127.15	157.62	162.15	153.24	146.98	158.48	175.70	187.25	179.84
Cotton, 8 market avg. spot (cts/lb)	68.37	58.55	53.47	65.73	54.75	54.60	57.72	65.94	70.42	73.06
Tobacco, avg. price at auction (cts/lb)	170.64	172.05	153.93	155.02	145.82	146.51	145.59	145.59	145.59	141.80
Rice, f.o.b. mill, Houston ($/cwt)	19.47	16.49	14.60	13.00	10.50	10.50	10.50	10.50	10.50	10.50
Inedible tallow, Chicago (cts/lb)	17.47	14.33	9.03	7.78	11.00	9.77	12.98	15.13	14.73	15.17
Import commodities										
Coffee, N.Y. spot ($/lb)	1.46	1.42	2.01	1.88	1.20	1.03	1.02	1.09	1.08	1.00
Rubber, N.Y. spot (cts/lb)	49.70	41.91	42.87	43.51	46.51	46.11	47.39	49.06	50.58	53.47
Cocoa beans, N.Y. ($/lb)	1.06	.89	.88	.88	.85	.87	.90	.90	.87	.93

Information contact: Mary Teymourian (202) 786-1692.

Table 28.—Indexes of Nominal & Real Trade-Weighted Dollar Exchange Rates

	1986				1987							
	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug
						March 1973=100						
Total U.S. trade 1/ Nominal	107	107	108	107	101	99	99	97	96	98	99	100*
						April 1971=100						
Agricultural trade												
Nominal 2/	4,680	4,733	4,794	4,903	5,238	6,102	6,954	7,763	9,838	12,507	14,245	14,933
Real 3/	87	89	90	88	86	85*	85*	84*	84*	86*	87*	85*
Soybeans												
Nominal 2/	266	280	294	305	314	327	343	358	374	394	412	428
Real 3/	75	75	76	75	72	71*	71*	70*	69*	70*	71*	71*
Wheat												
Nominal 2/	26,514	26,733	27,020	27,616	29,557	34,601	39,700	44,815	57,302	73,477	83,997	88,101
Real 3/	102	109	110	107	105	104*	106*	103*	106*	111*	112*	106*
Corn												
Nominal 2/	4,320	4,369	4,430	4,534	4,842	5,631	6,407	7,158	9,020	11,436	13,013	13,642
Real 3/	80	80	80	79	76	76*	76*	74*	73*	75*	76*	75*
Cotton												
Nominal 2/	233	236	237	237	234	233	233	272	270	269	269	269
Real 3/	91	92	92	92	91	90*	90*	89*	87*	88*	88*	87*

1/ Federal Reserve Board index of trade-weighted exchange value of the U.S dollar against 10 other major industrial country currencies, plus Switzerland. These currencies dominate the financing of U.S total trade. 2/ Nominal values are percentage changes in currency units per dollar, weighted by proportion of agricultural exports from the United States. An increase indicates that the dollar has appreciated. 3/ The real index deflates the nominal series by Consumer price changes of the countries involved, resulting in divergence between nominal and real indexes when high-inflation countries figure significantly. The nominal Federal Reserve index shows little divergence between nominal and real indexes because of similar inflation rates among the countries included. *Preliminary.

Information contact: Edward Wilson (202) 786-1688.

Table 29.—U.S. Trade Balance

	Fiscal years*									June
	1979	1980	1981	1982	1983	1984	1985	1986	1987 F	1987
						$ million				
Exports										
Agricultural	31,979	40,481	43,780	39,095	34,769	36,027	31,201	26,325	27,500	2,071
Nonagricultural	135,839	169,846	185,423	176,310	159,373	170,014	179,236	176,613	NA	18,225
Total 1/	167,818	210,327	229,203	215,405	194,142	206,041	210,437	202,938	NA	20,296
Imports										
Agricultural	16,186	17,276	17,218	15,481	16,271	18,916	19,740	20,875	20,000	1,767
Nonagricultural	177,424	223,590	237,469	233,353	230,629	297,736	313,722	342,855	NA	33,549
Total 2/	193,610	240,866	254,687	248,834	246,900	316,652	333,462	363,730	NA	35,316
Trade balance										
Agricultural	15,793	23,205	26,562	23,614	18,498	19,111	11,461	5,450	7,500	304
Nonagricultural	-41,585	-53,744	-52,046	-57,043	-71,256	-127,722	-134,486	-166,242	NA	-15,324
Total	-25,792	-30,539	-25,484	-33,429	-52,758	-108,611	-123,025	-160,792	NA	-15,020

*Fiscal years begin October 1 and end September 30. Fiscal year 1986 began Oct. 1, 1985 and ended Sept. 30, 1986.
1/ Domestic exports including Department of Defense shipments (F.A.S. value). 2/ Imports for consumption (customs value).
NA = not available. F = forecast.

Information contact: Steve MacDonald (202) 786-1621.

Table 30.—U.S. Agricultural Exports & Imports

	Fiscal years*				June	Fiscal years*				June
	1984	1985	1986	1987 F	1987	1984	1985	1986	1987 F	1987
	Thousand units					$ million				
Exports										
Animals, live (no) 1/	754	996	570	--	19	276	255	344	--	16
Meats & preps., excl. poultry (mt)	422	427	451	2/500	42	929	906	1,012	--	103
Dairy products (mt)	418	423	481	--	25	393	414	430	500	29
Poultry meats (mt)	225	234	265	400	34	280	257	282	--	34
Fats, oils, & greases (mt)	1,395	1,217	1,355	3/1,200	93	703	608	477	--	32
Hides & skins incl. furskins	--	--	--	--	--	1,318	1,325	1,456	--	139
Cattle hides, whole (no) 1/	24,283	25,456	25,973	--	1,999	1,010	1,019	1,150	--	116
Mink pelts (no) 1/	2,551	2,237	2,697	--	140	67	60	65	--	5
Grains & feeds (mt)	108,194	93,903	74,437	--	7,720	17,304	13,285	9,476	4/9,500	767
Wheat (mt)	41,699	28,523	25,490	29,000	3,260	6,497	4,264	3,259	5/3,100	313
Wheat flour (mt)	1,071	718	1,137	1,400	108	234	164	204	--	20
Rice (mt)	2,293	1,972	2,382	2,400	119	897	677	648	600	27
Feed grains, incl. products (mt)	55,546	55,362	36,293	47,800	3,402	8,217	6,884	3,819	3,800	281
Feeds & fodders (mt)	7,021	6,533	8,381	6/10,000	796	1,216	1,004	1,289	--	110
Other grain products (mt)	564	795	754	--	51	243	293	257	--	21
Fruits, nuts, and preps. (mt)	1,931	1,907	2,003	--	187	1,594	1,687	1,766	--	178
Fruit juices incl. froz. (hl) 1/	5,598	4,641	3,652	--	458	223	200	148	--	20
Vegetables & preps. (mt)	1,527	1,420	1,467	--	131	999	946	1,000	--	90
Tobacco, unmanufactured (mt)	227	257	224	200	10	1,433	1,588	1,318	1,200	38
Cotton, excl. linters (mt)	1,481	1,277	482	1,500	98	2,395	1,945	678	1,900	114
Seeds (mt)	252	289	269	--	12	326	352	366	400	15
Sugar, cane or beet (mt)	285	355	375	--	31	74	65	75	--	7
Oilseeds & products (mt)	26,961	23,803	27,557	--	1,609	8,602	6,195	6,266	7/6,200	372
Oilseeds (mt)	20,466	17,886	20,684	8/20,500	1,097	6,254	4,324	4,394	--	238
Soybeans (mt)	19,265	16,621	20,139	20,100	1,032	5,734	3,876	4,174	3,900	217
Protein meal (mt)	5,060	4,606	5,588	6,800	424	1,217	853	1,127	1,300	86
Vegetable oils (mt)	1,435	1,311	1,284	--	88	1,131	1,018	746	--	48
Essential oils (mt)	11	12	7	--	1	96	105	105	--	10
Other	465	443	568	--	69	1,082	1,069	1,126	--	108
Total	143,794	125,967	109,941	129,000	10,062	38,027	31,201	26,325	28,000	2,071
Imports										
Animals, live (no) 1/	1,907	2,120	1,885	--	198	596	569	637	700	60
Meats & preps., excl. poultry (mt)	905	1,123	1,139	--	122	1,931	2,214	2,248	--	267
Beef & veal (mt)	550	674	693	730	78	1,165	1,295	1,252	1,400	163
Pork (mt)	328	416	406	440	40	703	847	900	1,100	96
Dairy products (mt)	382	418	400	410	29	757	763	786	800	64
Poultry and products 1/	--	--	--	--	--	122	93	101	--	12
Fats, oils, & greases (mt)	18	21	22	--	1	13	18	17	--	1
Hides & skins, incl. furskins 1/	--	--	--	--	--	216	240	200	--	26
Wool, unmanufactured (mt)	59	43	53	--	5	193	145	160	--	18
Grains & feeds (mt)	1,805	2,070	2,311	2,500	201	534	604	668	700	55
Fruits, nuts, & preps., excl. juices (mt)	4,036	4,483	4,637	4,850	497	1,634	1,891	1,976	2,300	238
Bananas & plantains (mt)	2,727	3,022	3,042	3,100	293	666	752	740	800	81
Fruit juices (hl) 1/	27,247	35,112	31,539	33,000	3,031	671	995	698	700	69
Vegetables & preps. (mt)	2,093	2,140	2,199	2,250	162	1,314	1,347	1,560	1,600	118
Tobacco, unmanufactured (mt)	190	191	208	210	18	563	556	605	600	51
Cotton, unmanufactured (mt)	32	31	41	--	5	17	17	14	--	1
Seeds (mt)	82	92	89	130	2	97	91	111	100	6
Nursery stock & cut flowers 1/	--	--	--	--	--	292	318	353	--	20
Sugar, cane or beet (mt)	2,829	2,338	1,905	1,500	67	1,144	912	654	--	16
Oilseeds & products (mt)	1,137	1,271	1,508	1,550	107	799	784	639	600	40
Oilseeds (mt)	223	253	197	--	19	95	98	69	--	5
Protein meal (mt)	118	159	138	--	25	21	17	15	--	3
Vegetable oils (mt)	797	859	1,173	--	63	683	670	555	--	32
Beverages excl. fruit juices (hl)1/	14,120	15,494	15,488	--	1,444	1,547	1,622	1,848	--	160
Coffee, tea, cocoa, spices (mt)	1,776	1,868	1,940	1,870	182	4,777	4,983	6,099	5,000	420
Coffee, incl. products (mt)	1,128	1,128	1,223	1,170	134	3,300	3,244	4,400	3,300	298
Cocoa beans & products (mt)	451	539	507	520	32	1,058	1,285	1,189	1,200	72
Rubber & allied gums (mt)	809	799	801	900	61	854	680	615	700	53
Other	--	--	--	--	--	844	900	885	--	71
Total	--	--	--	--	--	18,916	19,740	20,875	20,500	1,767

*Fiscal years begin October 1 and end September 30. Fiscal year 1986 began Oct. 1, 1985 and ended Sept. 30, 1986. -- not available. 1/ Not included in total volume. 2/ Forecasts for footnoted items 2/-8/ are based on slightly different groups of commodities. Fiscal 1986 exports of categories used in the 1987 forecasts were: 2/ 413 thousand mt. 3/ 1,306 thousand mt. 4/ 9,648 million. 5/ 3,489 million, i.e. includes flour. 6/ 8,218 thousand mt. 7/ 6,439 million. 8/ 20,481 thousand mt. F = forecast.

Information contact: Steve MacDonald (202) 786-1621.

Table 31. U.S. Agricultural Exports by Region

Region & country	Fiscal years*				May	Change from year* earlier				May
	1984	1985	1986	1987 F	1987	1984	1985	1986	1987 F	1987
	$ million					Percent				
Western Europe	9,265	7,183	6,857	7,000	351	-9	-22	-5	2	14
European Community (EC-12)	8,650	6,668	6,442	6,600	331	9	-23	-3	2	15
Belgium-Luxembourg	836	470	361	--	14	3	-44	-23	--	16
France	510	396	431	--	21	-1	-22	9	--	10
Germany, Fed. Rep.	1,260	900	1,001	--	59	-13	-29	11	--	4
Italy	771	677	693	--	48	-4	-12	2	--	46
Netherlands	2,227	1,926	2,042	--	92	-21	-14	6	--	-1
United Kingdom	790	628	628	--	44	-4	-20	0	--	19
Portugal	702	502	308	--	18	10	-28	-39	--	9
Spain, incl. Canary Islands	1,232	832	723	--	13	3	-32	-13	--	28
Other Western Europe	615	515	415	400	20	-10	-16	-19	-4	3
Switzerland	311	232	128	--	7	-12	-26	-45	--	-10
Eastern Europe	741	532	447	500	29	-10	-28	-16	0	89
German Dem. Rep.	132	81	52	--	0	7	-39	-36	--	-82
Poland	197	126	42	--	4	-15	-36	-66	--	-21
Yugoslavia	180	137	134	--	5	-28	-24	-2	--	-21
Romania	185	88	112	--	13	35	-43	27	--	100
USSR	2,512	2,525	1,105	800	87	156	1	-56	-45	102
Asia	15,209	11,933	10,498	11,900	983	12	-22	-12	13	38
West Asia (Mideast)	1,865	1,452	1,243	1,700	109	26	-22	-14	34	18
Turkey	222	129	111	--	19	693	-42	-13	--	41
Iraq	423	371	321	--	42	31	-12	-13	--	30
Israel	351	300	255	--	9	20	-15	-15	--	-30
Saudia Arabia	497	381	335	--	14	11	-23	-12	--	-38
South Asia	867	599	517	400	31	-26	-31	-14	-2	-18
Bangladesh	157	206	94	--	19	3	31	-54	--	100
India	376	129	90	--	4	-51	-66	-30	--	-49
Pakistan	285	228	285	--	2	33	-20	25	--	-92
China	692	239	88	200	25	27	-65	-63	0	556
Japan	6,935	5,663	5,139	5,500	461	18	-18	-9	0	38
Southeast Asia	1,218	842	725	800	51	1	-31	-14	14	4
Indonesia	438	204	172	--	8	7	-53	-16	--	3
Philippines	300	285	270	--	19	-21	-5	-5	--	-19
Other East Asia	3,631	3,138	2,787	3,300	275	10	-14	-11	18	46
Taiwan	1,409	1,342	1,108	--	97	14	-5	-17	--	18
Korea, Rep.	1,816	1,400	1,277	--	144	6	-23	-9	--	84
Hong Kong	407	396	399	--	34	18	-3	1	--	20
Africa	2,868	2,527	2,135	1,800	159	26	-12	-16	-16	-5
North Africa	1,542	1,207	1,402	1,300	121	6	-22	16	0	3
Morocco	341	156	159	--	21	52	-54	2	--	180
Algeria	162	220	330	--	35	-20	36	50	--	-14
Egypt	882	766	875	--	62	-3	-13	14	--	-3
Sub-Sahara	1,327	1,320	733	500	37	62	-1	-44	-32	-24
Nigeria	345	367	158	--	1	4	6	-57	--	-81
Rep. S. Africa	525	189	70	--	2	304	-64	-63	--	-59
Latin America & Caribbean	5,279	4,570	3,599	3,900	306	9	-13	-21	8	-2
Brazil	438	557	444	--	10	10	27	-20	--	-31
Caribbean Islands	827	771	752	800	59	7	-7	-2	0	-3
Central America	396	361	334	400	29	11	-9	-7	33	42
Colombia	220	238	137	--	10	-14	8	-42	--	-37
Mexico	1,966	1,566	1,115	1,300	100	11	-20	-29	27	1
Peru	227	106	108	--	15	-12	-53	2	--	140
Venezuela	778	721	493	--	61	26	-7	-32	--	-23
Canada	1,936	1,727	1,466	1,800	172	4	-11	-15	23	48
Oceania	216	204	216	200	15	-4	-6	6	0	1
Total	38,027	31,201	26,325	28,000	2,071	9	-18	-16	6	23
Developed Countries	19,180	15,225	13,963	14,500	1,007	4	-21	-8	4	28
Less Developed Countries	14,902	12,680	10,721	12,000	922	7	-15	-15	12	11
Centrally Planned Countries	3,945	3,296	1,640	1,500	141	67	-16	-50	-9	127

*Fiscal years begin October 1 and end September 30. Fiscal year 1986 began Oct. 1, 1985 and ended Sept. 30, 1986. F = forecast. -- not available.

Note: Adjusted for transshipments through Canada.

Information contact: Steve MacDonald (202) 786-1621.

Table 32.—Farm Income Statistics

	Calendar years										
	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987 F
	$ billion										
1. Farm receipts	97.5	114.3	133.8	142.0	144.1	147.1	141.1	146.7	149.2	140.2	136 to 138
Crops (incl. net CCC loans)	48.6	53.2	62.3	71.7	72.5	72.3	67.1	69.4	74.4	63.6	58 to 60
Livestock	47.6	59.2	69.2	68.0	69.2	70.3	69.4	72.9	69.8	71.6	72 to 74
Farm related 1/	1.2	1.9	2.2	2.3	2.5	4.8	4.5	4.4	5.0	5.1	4 to 6
2. Direct Government payments	1.8	3.0	1.4	1.3	1.9	3.5	9.3	8.4	7.7	11.8	14 to 16
Cash payments	1.8	3.0	1.4	1.3	1.9	3.5	4.1	4.0	7.6	8.1	7 to 9
Value of PIK commodities	0.0	0.0	0.0	0.0	0.0	0.0	5.2	4.5	0.1	3.7	7 to 8
3. Total gross farm income (4+5+6) 2/	108.8	128.4	150.7	149.3	166.3	163.5	153.1	174.7	166.0	159.5	159 to 161
4. Gross cash income (1+2)	99.3	117.3	135.1	143.3	146.0	150.6	150.4	155.1	156.9	152.0	151 to 153
5. Nonmoney income 3/	8.4	9.3	10.6	12.3	13.8	14.3	13.5	13.4	11.8	10.8	8 to 10
6. Value of inventory change	1.1	1.8	5.0	-6.3	6.5	-1.4	-10.9	6.2	-2.7	-3.3	-3 to 0
7. Cash expenses 4/	71.4	84.2	101.7	109.1	113.2	112.5	113.3	116.3	109.6	100.1	95 to 97
8. Total expenses	88.9	103.2	123.3	133.1	139.4	140.0	140.4	142.7	133.7	122.1	116 to 118
9. Net cash income (4-7)	27.8	33.1	33.4	34.2	32.8	38.1	37.1	38.8	47.3	52.0	54 to 58
10. Net farm income (3-8)	19.9	25.2	27.4	16.1	26.9	23.5	12.7	32.0	32.3	37.5	41 to 45
Deflated (1982$)	29.5	34.9	34.9	18.8	28.6	23.5	12.2	29.7	29.1	32.9	35 to 39
11. Off-farm income	26.1	29.7	33.8	34.7	35.8	36.4	37.0	38.3	42.5	44.7	47 to 49
12. Loan changes 5/: Real estate	7.6	7.6	13.0	9.3	9.4	4.0	2.5	-0.8	-5.6	-7.3	-9 to -5
13. 5/: Nonreal estate	6.8	8.3	10.8	5.8	6.2	3.4	1.0	-0.8	-9.2	-10.5	-10 to -6
14. Rental income plus monetary change	3.5	4.1	6.3	6.1	6.4	6.3	5.3	8.8	8.8	7.8	6 to 8
15. Capital expenditures 5/	15.0	17.9	19.8	18.0	16.8	13.3	12.7	12.5	9.6	8.6	6 to 8
16. Net cash flow (9+12+13+14-15)	30.8	35.1	43.7	37.5	37.8	38.4	33.6	33.6	31.6	33.4	39 to 43

R = revised. F = forecast. 1/ Income from machine hire, custom work, sales of forest products, and other misc. cash sources. 2/ Numbers in parentheses indicate the combination of items required to calculate a given item. 3/ Value of home consumption of self-produced food and imputed gross rental value of farm dwellings. 4/ Excludes capital consumption, perquisites to hired labor, and farm household expenses. 5/ Excludes farm households. Totals may not add due to rounding.

Information contact: Richard Kodl (202) 786-1808.

Table 33.—Balance Sheet of the U.S. Farming Sector

	Calendar years										
	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986 P	1987 F
	$ billion										
Assets											
Real estate 1/	507.7	600.7	704.2	779.2	780.2	745.6	736.1	639.6	559.6	515	510 to 520
Non-real estate	149.0	183.0	213.9	224.0	225.0	232.2	220.4	216.5	211.9	196	190 to 200
Livestock & poultry	31.9	51.3	61.4	60.6	53.5	53.0	49.7	49.6	45.9	44	47 to 51
Machinery & motor vehicles	69.9	78.2	90.8	96.8	103.0	103.7	100.9	95.0	92.2	89	84 to 88
Crops stored	24.8	28.0	33.5	36.5	36.1	40.6	33.2	33.7	37.1	29	25 to 28
Financial assets	22.4	25.5	28.2	30.1	32.4	34.9	36.5	38.1	36.7	35	34 to 37
Total farm assets	656.7	783.7	918.1	1,003.2	1,005.2	977.8	956.5	856.1	771.4	712	705 to 715
Liabilities											
Real estate	58.0	65.6	78.5	87.9	97.2	101.2	103.7	102.9	97.3	90	81 to 85
Non-real estate	52.4	66.4	76.7	82.5	91.6	102.4	98.7	95.8	94.8	86	70 to 74
CCC loans	4.5	5.7	5.1	5.0	8.0	15.4	10.8	8.6	16.9	19	12 to 14
Other non-real estate	52.4	60.7	71.6	77.5	83.6	87.0	87.9	87.1	77.9	67	58 to 60
Total farm liabilities	114.9	131.9	155.2	170.4	188.8	203.6	202.4	198.7	192.1	176	153 to 158
Total farm equity	541.8	651.8	762.9	832.9	816.4	774.2	754.0	657.3	579.3	536	553 to 558
	Percent										
Selected ratios											
Debt-to-assets	17.5	16.8	16.9	17.0	18.8	20.8	21.2	23.2	24.9	24.7	22
Debt-to-equity	20.0	19.3	19.6	19.7	23.1	26.3	26.8	30.2	33.2	32.9	28
Debt-to-net cash income	412.3	398.2	464.4	497.7	575.7	554.9	545.5	512.0	406.3	338.6	283.1

1/ Excludes farm household. P = preliminary. F = forecast.

Information contact: Richard Kodl (202) 786-1808

Table 34.—Cash Receipts from Farm Marketings, by State

Region State	Livestock & Products				Crops 1/				Total 1/			
	1985	1986	May 1987	June 1987	1985	1986	May 1987	June 1987	1985	1986	May 1987	June 1987
						$ million 2/						
North Atlantic												
Maine	229	223	19	19	137	143	26	13	366	365	45	31
New Hampshire	70	72	6	6	36	38	2	2	106	109	9	8
Vermont	354	361	30	28	34	36	2	1	387	398	32	29
Massachusetts	128	131	12	11	262	292	14	14	389	423	26	25
Rhode Island	14	12	1	1	62	63	4	2	76	75	5	3
Connecticut	205	210	16	16	150	162	12	8	354	372	28	24
New York	1,847	1,809	146	137	730	724	41	40	2,578	2,533	188	177
New Jersey	144	150	13	12	443	430	30	42	587	580	43	54
Pennsylvania	2,184	2,239	199	188	1,003	926	65	55	3,187	3,165	263	242
North Central												
Ohio	1,515	1,566	137	132	2,602	2,043	24	68	4,117	3,610	161	200
Indiana	1,728	1,852	175	162	3,063	2,258	36	61	4,791	4,110	211	222
Illinois	2,055	2,143	228	197	5,915	4,737	82	25	7,970	6,880	308	222
Michigan	1,231	1,236	105	103	1,692	1,429	47	61	2,923	2,664	152	164
Wisconsin	4,055	4,164	378	368	1,019	892	21	27	5,075	5,057	399	395
Minnesota	3,370	3,395	306	283	3,223	2,680	41	39	6,594	6,074	348	322
Iowa	4,883	4,982	438	439	4,582	4,124	-129	83	9,465	9,106	308	522
Missouri	1,924	1,930	157	134	1,763	1,586	26	88	3,688	3,516	183	222
North Dakota	687	676	53	44	2,001	1,623	59	133	2,688	2,299	112	177
South Dakota	1,900	1,525	126	103	1,157	938	1	-11	3,057	2,463	127	91
Nebraska	4,113	4,260	423	400	3,227	2,669	-28	50	7,341	6,928	394	450
Kansas	3,336	3,447	385	282	2,552	1,978	11	124	5,888	5,425	396	406
Southern												
Delaware	353	402	30	28	139	118	5	11	492	520	35	39
Maryland	764	814	62	57	456	371	21	24	1,220	1,186	83	81
Virginia	1,062	1,127	82	85	623	486	14	31	1,684	1,613	96	116
West Virginia	191	156	13	13	56	71	1	3	247	227	14	15
North Carolina	1,958	2,174	171	152	1,971	1,608	43	71	3,929	3,782	214	223
South Carolina	415	455	36	33	621	440	10	56	1,036	894	46	89
Georgia	1,727	1,882	153	131	1,550	1,324	32	45	3,277	3,206	185	176
Florida	1,022	1,000	85	84	3,681	3,688	594	300	4,704	4,688	679	384
Kentucky	1,352	1,311	78	64	1,583	1,079	11	28	2,934	2,389	89	93
Tennessee	1,000	1,033	108	88	1,091	891	22	32	2,091	1,924	131	121
Alabama	1,301	1,431	118	98	773	578	18	30	2,074	2,009	137	128
Mississippi	1,011	1,044	82	74	1,240	741	-11	19	2,250	1,785	70	94
Arkansas	1,825	2,017	136	163	1,607	1,005	-6	78	3,433	3,022	130	241
Louisiana	491	503	42	47	993	869	11	7	1,485	1,372	53	54
Oklahoma	1,726	1,875	161	143	957	746	46	123	2,683	2,622	207	266
Texas	5,441	5,516	546	499	3,841	2,928	216	302	9,282	8,444	762	801
Western												
Montana	804	720	47	33	422	493	17	16	1,226	1,213	64	49
Idaho	874	884	77	68	1,219	1,042	42	38	2,093	1,925	118	107
Wyoming	478	455	29	16	123	111	2	2	600	566	30	18
Colorado	2,084	2,218	173	191	1,097	890	43	45	3,181	3,109	216	236
New Mexico	718	708	70	44	368	302	17	32	1,086	1,010	87	76
Arizona	693	699	100	105	813	796	82	118	1,506	1,495	182	224
Utah	413	437	31	34	142	134	5	9	555	570	36	43
Nevada	144	160	15	12	81	72	3	4	225	232	18	16
Washington	926	981	77	75	1,908	1,812	118	157	2,834	2,793	195	232
Oregon	622	649	46	54	1,115	1,135	42	67	1,737	1,784	88	121
California	4,324	4,446	378	370	9,826	9,602	831	822	14,150	14,049	1,209	1,192
Alaska	8	10	1	1	18	19	1	1	26	29	2	2
Hawaii	83	84	7	7	443	491	41	40	526	575	48	47
United States	69,780	71,573	6,309	5,836	74,413	63,612	2,654	3,432	144,193	135,185	8,963	9,269

1/ Sales of farm products include receipts from commodities placed under CCC loans, minus value of redemptions during the period.
2/ Estimates as of the end of current month. Rounded data may not add.

Information contact: Roger Strickland (202) 786-1804.

Table 35.—Cash Receipts from Farming

	Annual					1986	1987				
	1981	1982	1983	1984	1985	1986	June	Feb	Mar	Apr	May	June
						$ million						
Farm marketings and CCC loans *	141,616	142,594	136,580	142,314	144,193	135,185	8,993	8,368	8,999	8,665	8,963	9,269
Livestock and products	69,151	70,257	69,437	72,936	69,780	71,573	5,396	5,456	6,062	6,270	6,309	5,836
Meat animals	39,748	40,917	38,893	40,832	38,589	39,137	2,805	3,116	3,538	3,717	3,746	3,363
Dairy products	18,095	18,234	18,763	17,944	18,063	17,824	1,472	1,399	1,538	1,507	1,546	1,457
Poultry and eggs	9,949	9,520	9,979	12,182	11,191	12,678	979	831	857	912	879	877
Other	1,358	1,586	1,801	1,968	1,937	1,934	140	111	129	134	138	140
Crops	72,465	72,338	67,143	69,378	74,413	63,612	3,597	2,911	2,937	2,394	2,654	3,432
Food grains	11,619	11,412	9,713	9,576	9,080	5,948	564	58	98	20	84	680
Feed crops	17,770	17,408	15,535	15,831	22,479	17,849	688	580	61	-190	-95	171
Cotton (lint and seed)	4,055	4,457	3,705	3,270	3,730	2,920	78	137	69	-24	23	189
Tobacco	3,250	3,342	2,768	2,841	2,722	1,918	0	26	10	22	0	0
Oil-bearing crops	13,853	13,817	13,546	13,894	12,595	10,507	365	480	671	370	312	411
Vegetables and melons	8,772	8,063	8,462	9,142	8,558	8,705	848	570	824	888	1,142	925
Fruits and tree nuts	6,603	6,846	6,064	6,768	6,836	6,900	579	488	431	341	453	570
Other	6,543	6,993	7,352	8,057	8,413	8,865	476	572	773	970	736	487
Government payments	1,932	3,492	9,295	8,430	7,704	11,813	1,230	2,558	2,204	1,724	608	35
Total	143,548	146,086	145,875	150,744	151,897	146,998	10,223	10,926	11,203	10,389	9,571	9,304

* Receipts from loans represent value of commodities placed under CCC loans minus value of redemptions during the month.

Information contact: Roger Strickland (202) 786-1804.

Table 36.—Farm Production Expenses

	Calendar years									
	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
						$ million 2/				
Feed	13,967	16,036	19,314	20,971	20,855	18,592	21,725	19,852	18,015	16,179
Livestock	7,072	10,150	13,012	10,670	8,999	9,684	8,814	9,498	8,996	9,609
Seed	2,484	2,638	2,904	3,220	3,428	3,172	2,993	3,448	3,350	2,984
Farm-origin inputs	23,523	28,824	35,230	34,861	33,282	31,448	33,532	32,798	30,361	28,772
Fertilizer	6,529	6,620	7,369	9,491	9,409	8,018	7,067	7,429	7,259	5,787
Fuels and oils	4,356	4,609	5,635	7,879	8,570	7,888	7,503	7,143	6,584	4,790
Electricity	1,069	1,389	1,447	1,526	1,747	2,041	2,146	2,166	2,150	2,121
Pesticides	1,938	2,656	3,436	3,539	4,201	4,282	4,154	4,767	4,817	4,331
Manufactured inputs	13,892	15,274	17,887	22,435	23,927	22,229	20,870	21,505	20,810	17,029
Short-term interest	4,203	5,167	6,868	8,717	10,722	11,349	10,615	10,396	8,821	7,795
Real estate interest	4,329	5,060	6,190	7,544	9,142	10,481	10,815	10,733	9,878	9,131
Total interest charges	8,532	10,227	13,058	16,261	19,864	21,830	21,430	21,129	18,699	16,926
Repair and maintenance 3/	5,765	6,638	7,280	7,648	7,587	6,428	6,529	6,416	6,370	6,426
Hired labor	7,953	8,279	8,981	9,293	8,931	10,075	9,726	9,729	9,792	9,875
Machine hire and custom work	1,682	1,776	2,063	1,823	1,984	2,025	1,896	2,170	2,184	1,791
Dairy deduction	0	0	0	0	0	0	650	657	163	431
Marketing, storage, and transportation	1,390	2,508	3,162	3,070	3,523	4,301	3,904	4,012	4,127	3,652
Misc. operating expenses 4/	3,582	5,194	6,246	6,308	6,343	7,262	8,439	8,450	7,942	7,344
Other operating expenses	20,372	24,395	27,732	28,142	28,368	30,889	31,143	31,433	30,579	29,519
Capital consumption	15,493	16,963	19,345	21,474	23,573	24,287	23,873	23,105	20,891	18,997
Taxes	3,660	3,603	3,871	3,891	4,246	4,036	4,469	4,059	4,231	4,125
Net rent to non-operator landlord	3,412	3,963	6,182	6,075	6,184	6,059	5,060	8,640	8,124	6,684
Other overhead expenses	22,565	24,529	29,398	31,440	34,003	34,381	33,402	35,805	33,247	29,806
Total production expenses	88,884	103,249	123,305	133,139	139,444	139,978	140,375	142,669	133,696	122,052

1/ Includes operator household. 2/ Totals may not add due to rounding. 3/ Beginning in 1982 repairs and maintenance excludes motor vehicle registration fees and insurance. 4/ Beginning in 1982, misc. operating expenses includes other livestock purchases and motor vehicle registration fees and insurance.

Information contact: Richard Kodl (202) 786-1808; Craig Jagger (202) 786-1804.

Table 37.—CCC Net Outlays by Commodity & Function

	Fiscal years										
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987E	1988E
	$ million										
Commodity											
Feed grains	2,288	1,144	1,286	-533	5,397	6,815	-758	5,211	12,211	13,388	8,272
Wheat	844	308	879	1,543	2,238	3,419	2,536	4,691	3,440	2,787	2,042
Rice	-66	49	-76	24	164	664	333	990	947	1,020	753
Upland cotton	224	141	64	336	1,190	1,363	244	1,553	2,142	1,619	89
Tobacco	98	157	-88	-51	103	880	346	455	253	-326	-217
Dairy	240	24	1,011	1,894	2,182	2,528	1,502	2,085	2,337	1,238	993
Soybeans	31	4	116	87	169	288	-585	711	1,597	-446	47
Peanuts	-39	27	28	28	12	-6	1	12	32	7	1/
Sugar	395	313	-405	-121	-5	49	10	184	214	-350	--
Honey	3	-2	9	8	27	48	90	81	89	82	66
Wool	33	39	35	42	54	94	132	109	123	149	126
Other	1,608	1,407	-107	780	122	2,710	3,463	1,601	2,455	3,959	4,056
Total	5,656	3,612	2,752	4,036	11,652	18,851	7,315	17,683	25,841	23,127	16,227
Function											
Price support loans	1,377	2	-66	174	7,015	8,438	-27	6,272	13,628	11,549	5,618
Direct payments	2,268	1,811	418	1,030	1,491	3,600	2,117	7,827	6,746	6,109	3,876
Purchases	100	10	1,681	1,602	2,031	2,540	1,470	1,331	1,670	-479	276
Producer storage payments	216	247	254	32	679	964	268	329	485	578	610
Processing, storage, & transportation	89	128	259	323	355	665	639	657	1,013	1,539	1,634
Operating expense	101	97	157	159	294	328	362	346	457	537	530
Interest expenditure	-106	238	518	220	-13	3,525	1,064	1,435	1,411	1,134	1,055
Export programs	948	417	-669	-940	65	398	743	134	102	459	615
Other	662	662	200	1,436	-265	-1,607	679	-648	329	1,701	2,013
Total	5,656	3,612	2,752	4,036	11,652	18,851	7,315	17,683	25,841	23,127	16,227

E = Estimated in the FY 1988 Mid-Season Review. Minus (-) indicates a net receipt (excess of repayments or other receipts over gross outlays of funds). 1/ = less than 500,000.

Information contact: Richard Pazdalski (202) 447-5148

Transportation

Table 38.—Rail Rates; Grain & Fruit/Vegetable Shipments

	Annual			1986	1987					
	1984	1985	1986 P	July	Feb	Mar	Apr	May	June	July
Rail freight rate index 1/ (Dec 1984=100)										
All products	99.3	100.0	100.7	100 8	99.8	99 8	100.1 P	100.0 P	100.2 P	100.1 P
Farm products	98.7	99.0	99.6	100.3	98.9	99.1	99.3 P	97.9 P	99.5 P	99.3 P
Grain	98.6	98.3	98.9	99 2	98.3	98.8	98.7 P	96 9 P	98.8 P	98.6 P
Food products	99.1	100.1	99.9	99.6	98.4	98.4	98.6 P	98.7 P	98 8 P	98.8 P
Grain										
Rail carloadings (thou cars) 2/	27.2	22.9	24.3	24.4	26.7 P	27.3 P	25.3 P	25.7 P	32.7 P	31 7 P
Fresh fruit & vegetable shipments										
Piggy back (thou cwt) 3/ 4/	570	602	630	697	543 P	493 P	678 P	864 P	833 P	792 P
Rail (thou cwt) 3/ 4/	640	532	556	334	518 P	533 P	624 P	810 P	917 P	469 P
Truck (thou cwt) 3/ 4/	8,006	8,298	8,762	9,439	8,454 P	8,541 P	9,771 P	10,197 P	11,270 P	10,217 P
Cost of operating trucks hauling produce 5/										
Owner operator (cts/mile)	115.5	116.1	113.1	111.8	115.0	115.1	115.1	115.5	115.4	119.8
Fleet operation (cts/mile)	115.3	116.7	113.6	112 1	115.2	114.9	115 0	115.8	116.0	116.9

1/ Department of Labor, Bureau of Labor Statistics, revised March 1985. 2/ Weekly average; from Association of American Railroads. 3/ Weekly average; from Agricultural Marketing Service, USDA. 4/ Preliminary data for 1986 and 1987. 5/ Office of Transportation, USDA. P = preliminary.

Information contact: T.Q. Hutchinson (202) 786-1840.

Indicators of Farm Productivity

Table 39.—Indexes of Farm Production Input Use & Productivity

(See the Jan.-Feb. 1987 issue.)

Information contact: James Johnson (202) 786-1800.

Food Supply and Use

Table 40.—Per Capita Food Consumption Indexes (1967 = 100)

(See the Dec. 1986 issue.)

Information contact: Harry Harp (202) 786-1870.

Table 41.—Per Capita Consumption of Major Food Commodities (Retail Weight)

(See the Dec. 1986 issue.)

Information contact: Harry Harp (202) 786-1870.

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